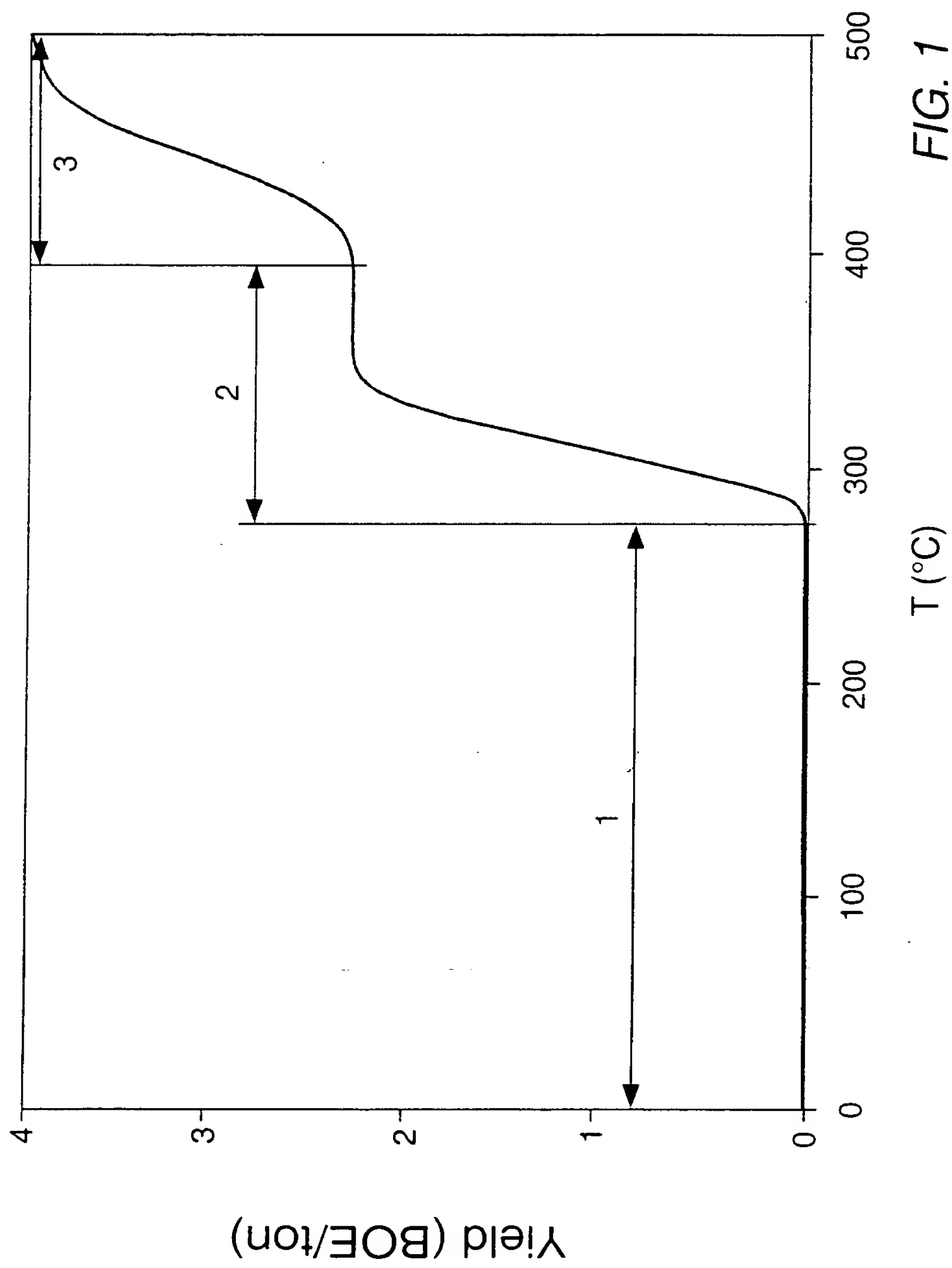


[illegible]



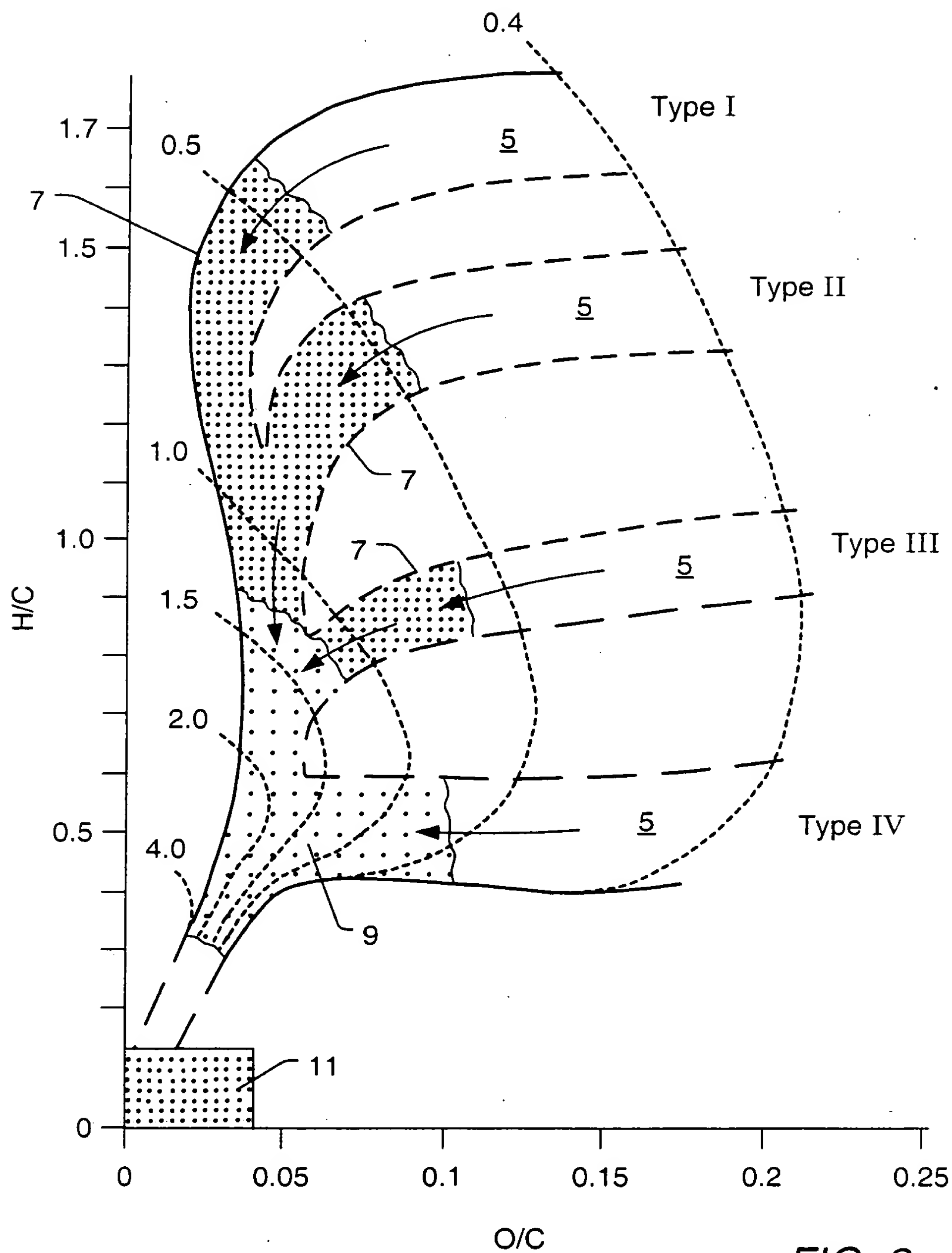


FIG. 2



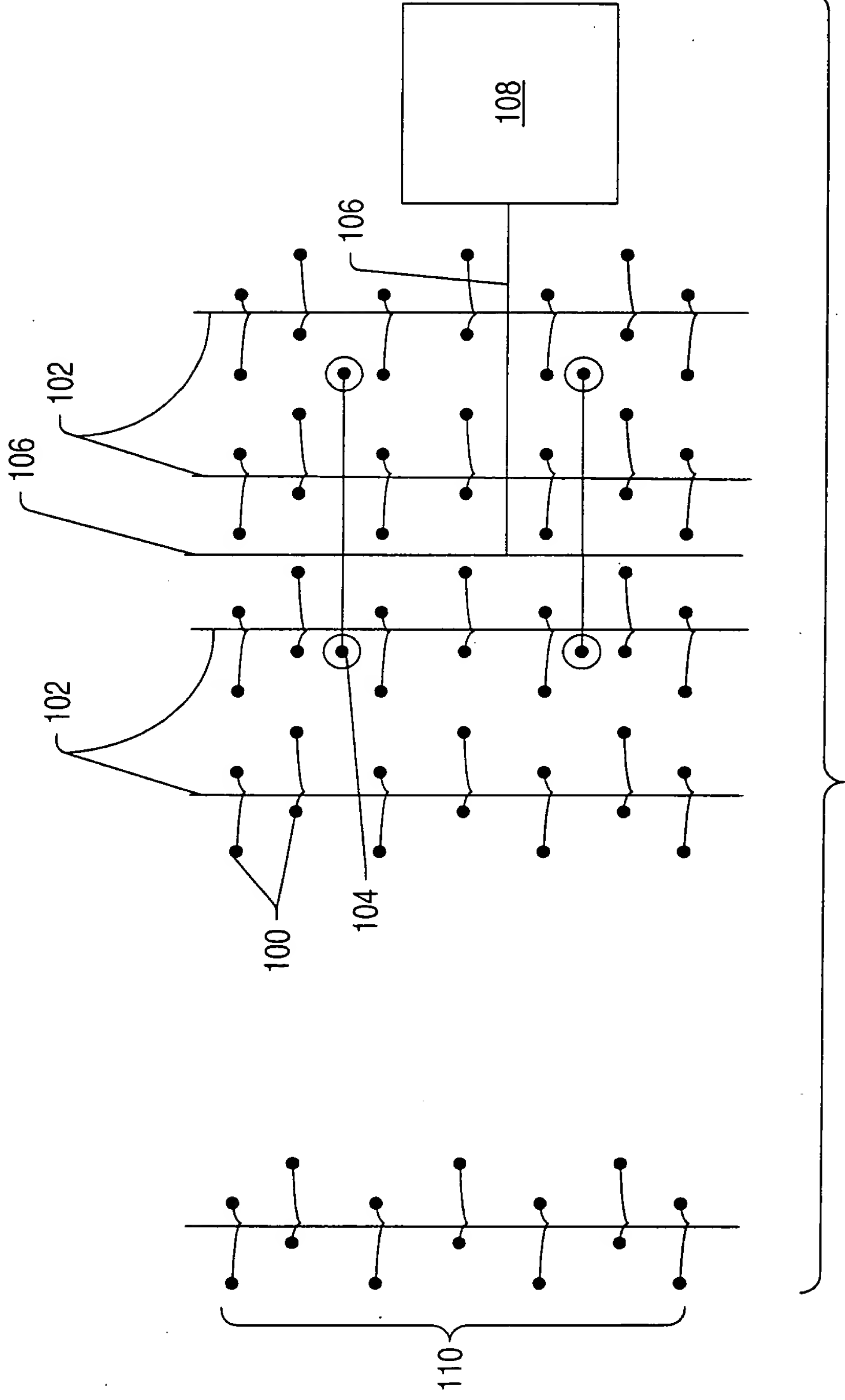


FIG. 3



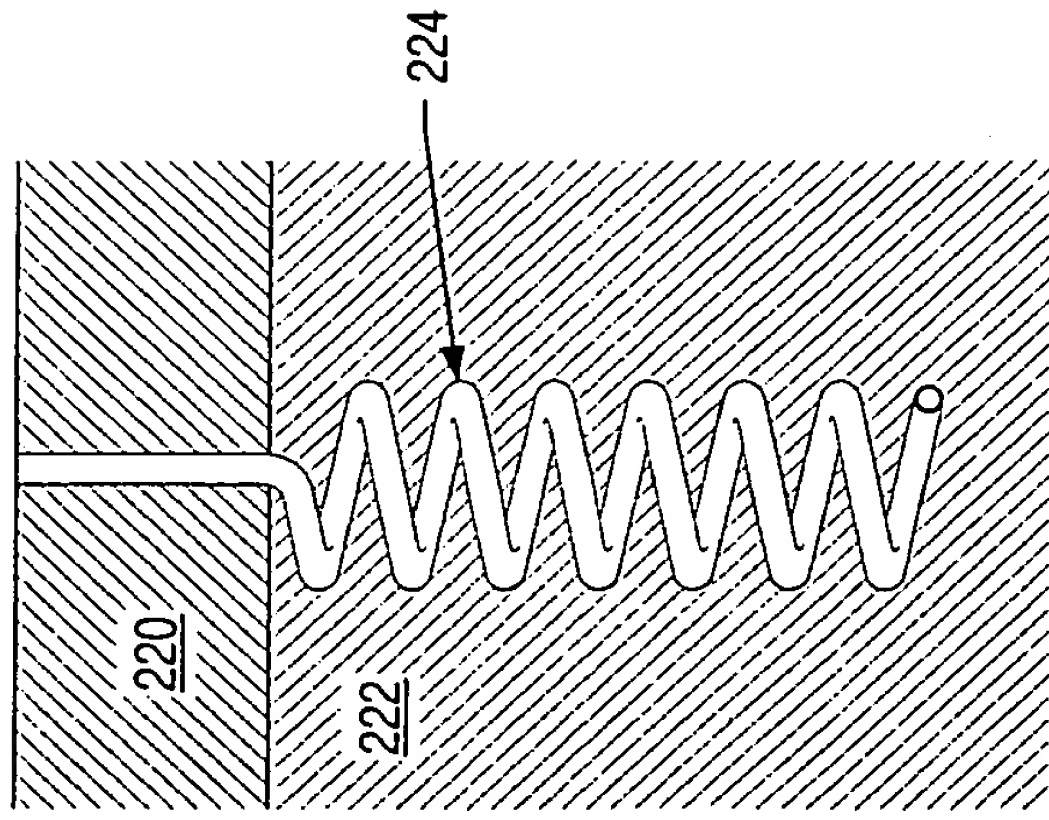


FIG. 3a

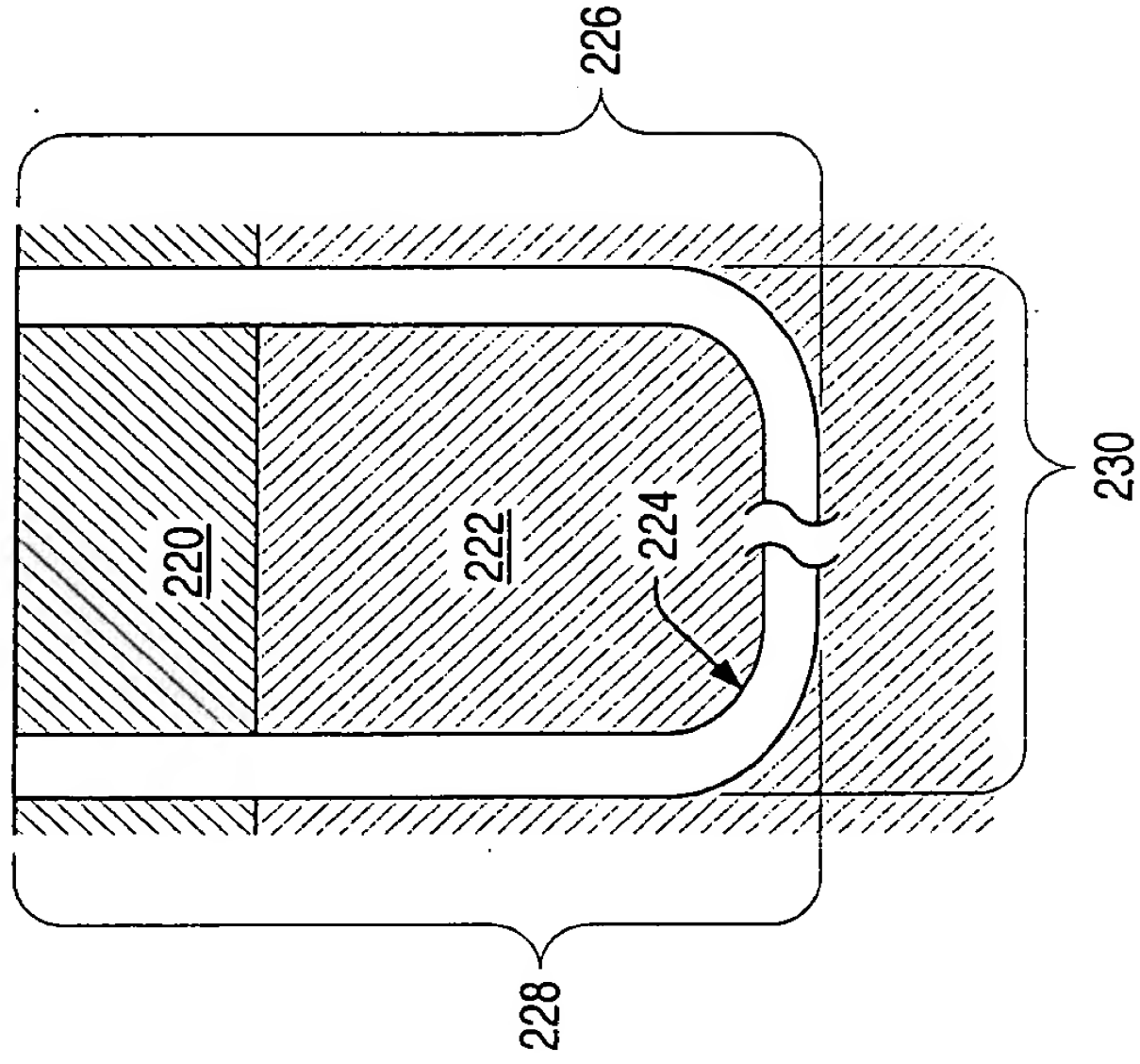


FIG. 3b

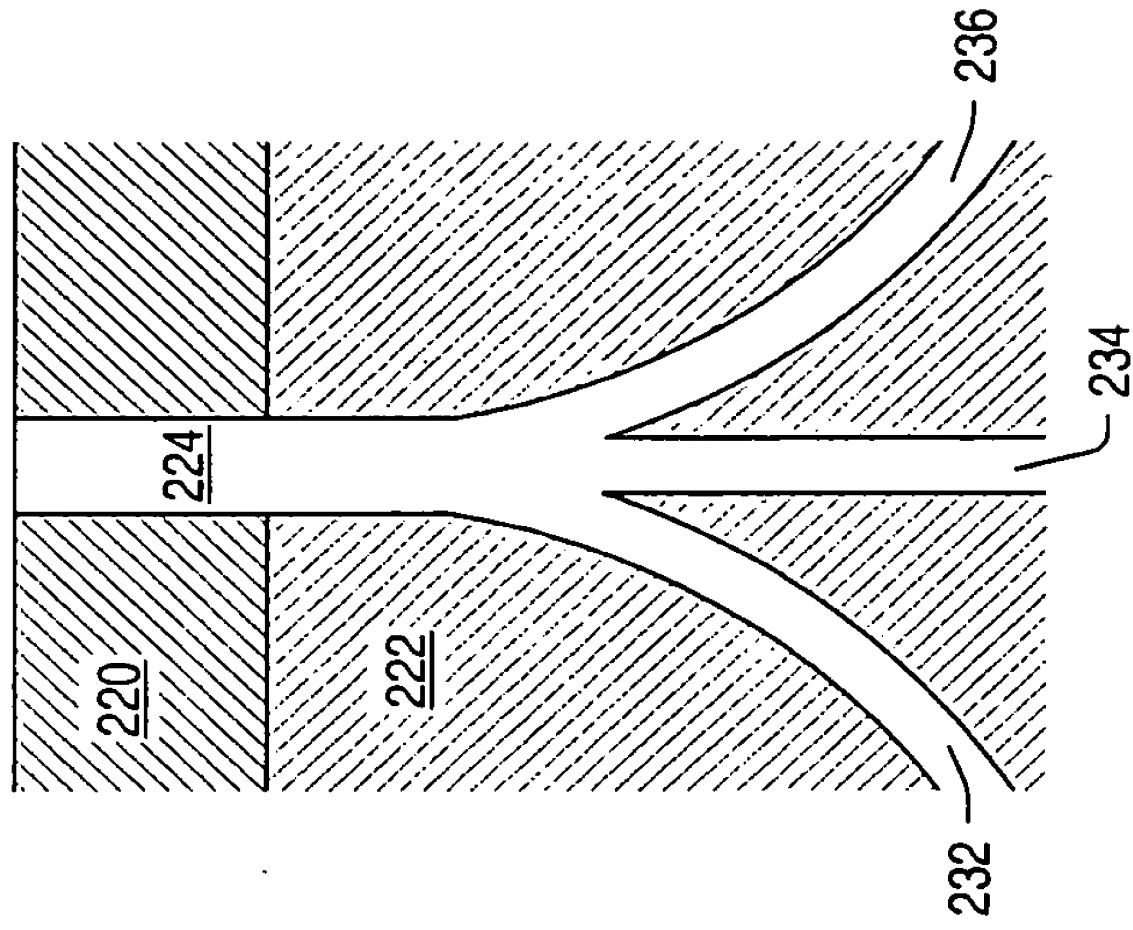


FIG. 3c



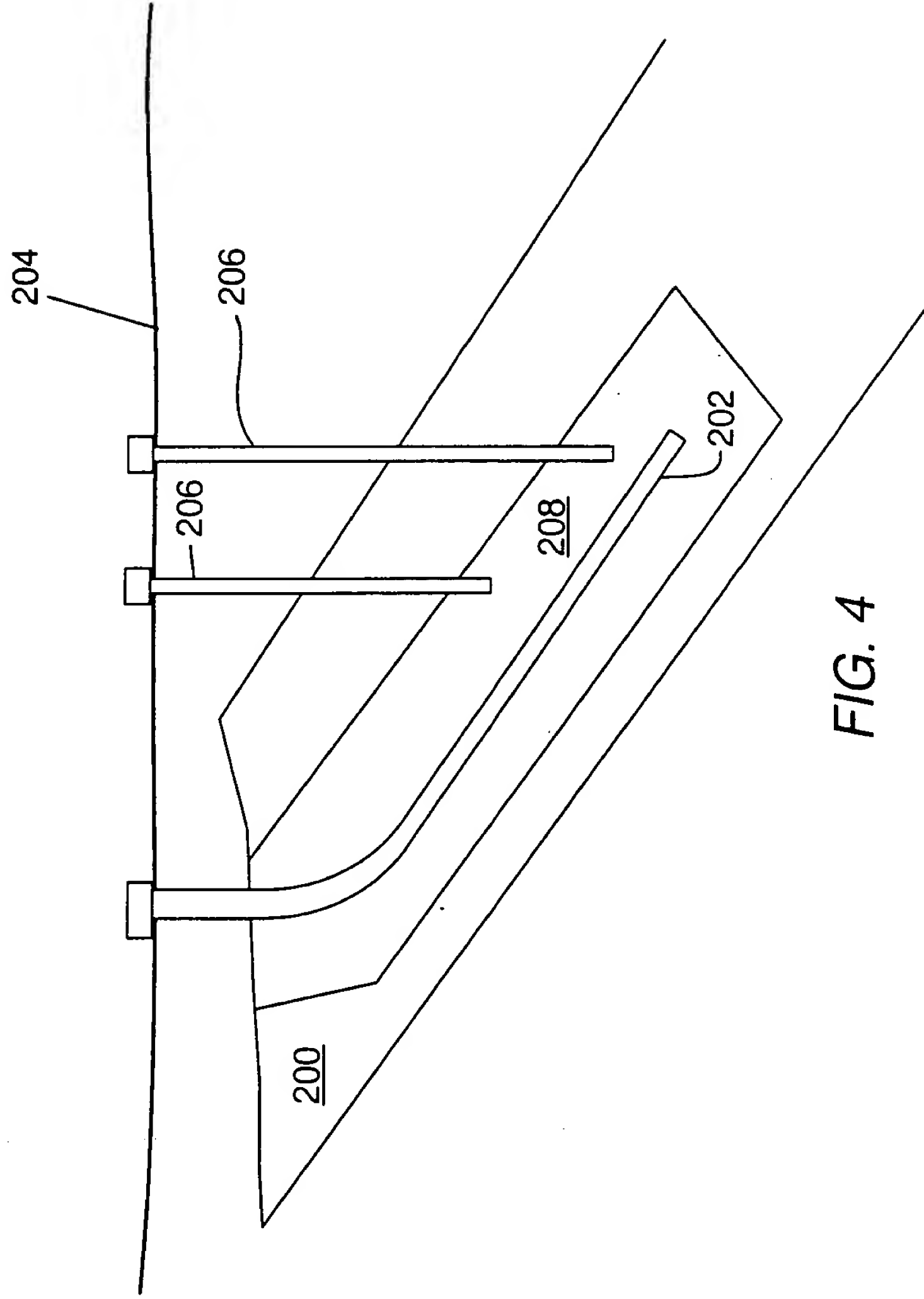
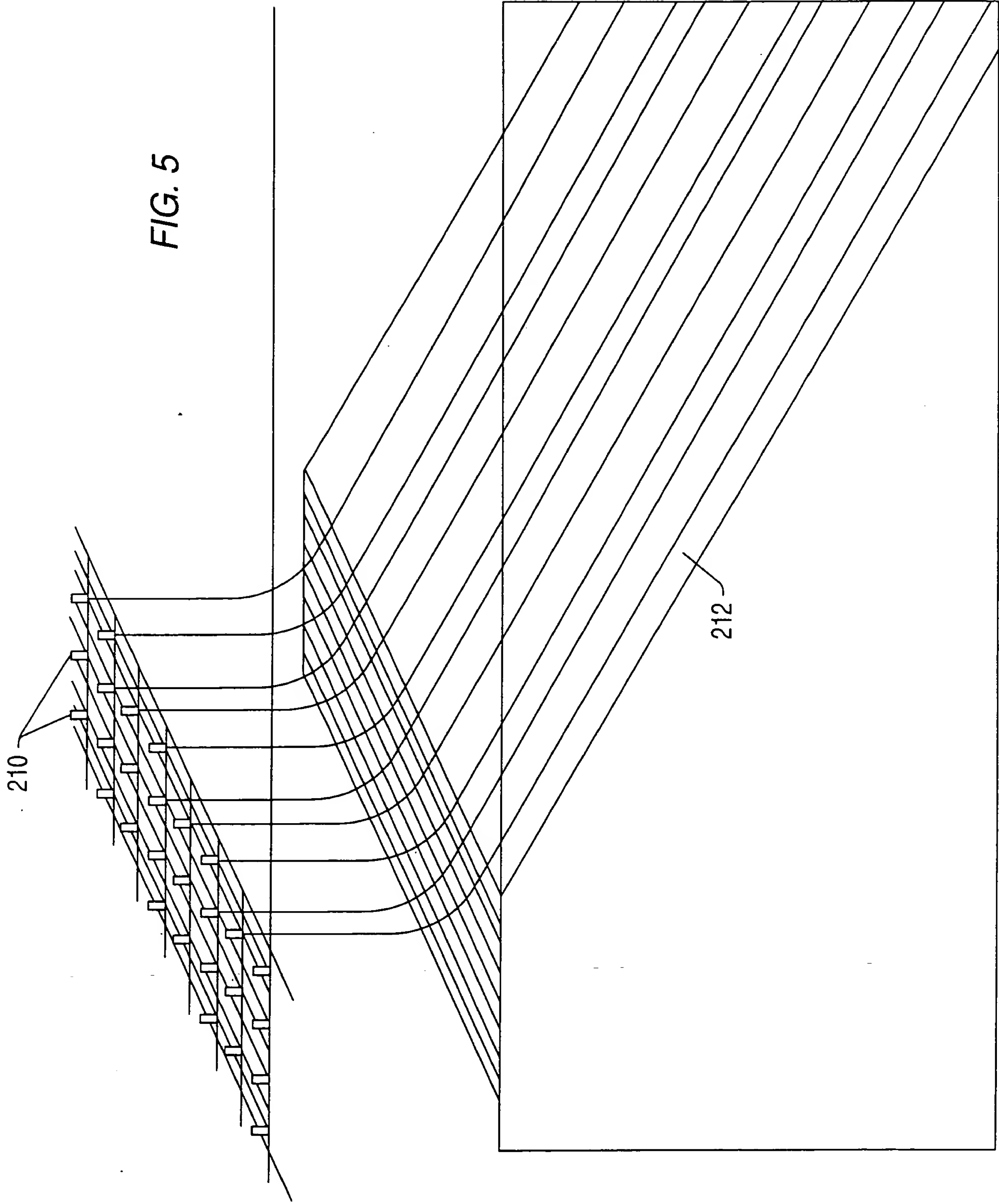


FIG. 4







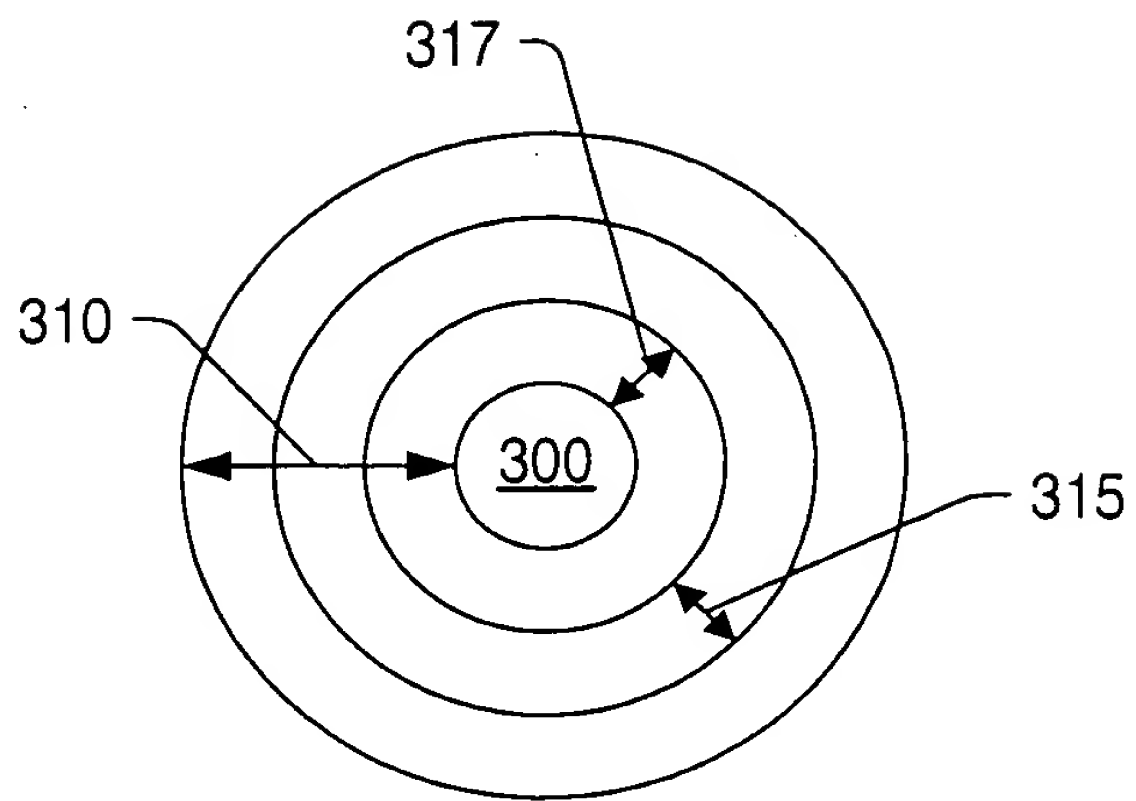


FIG. 6

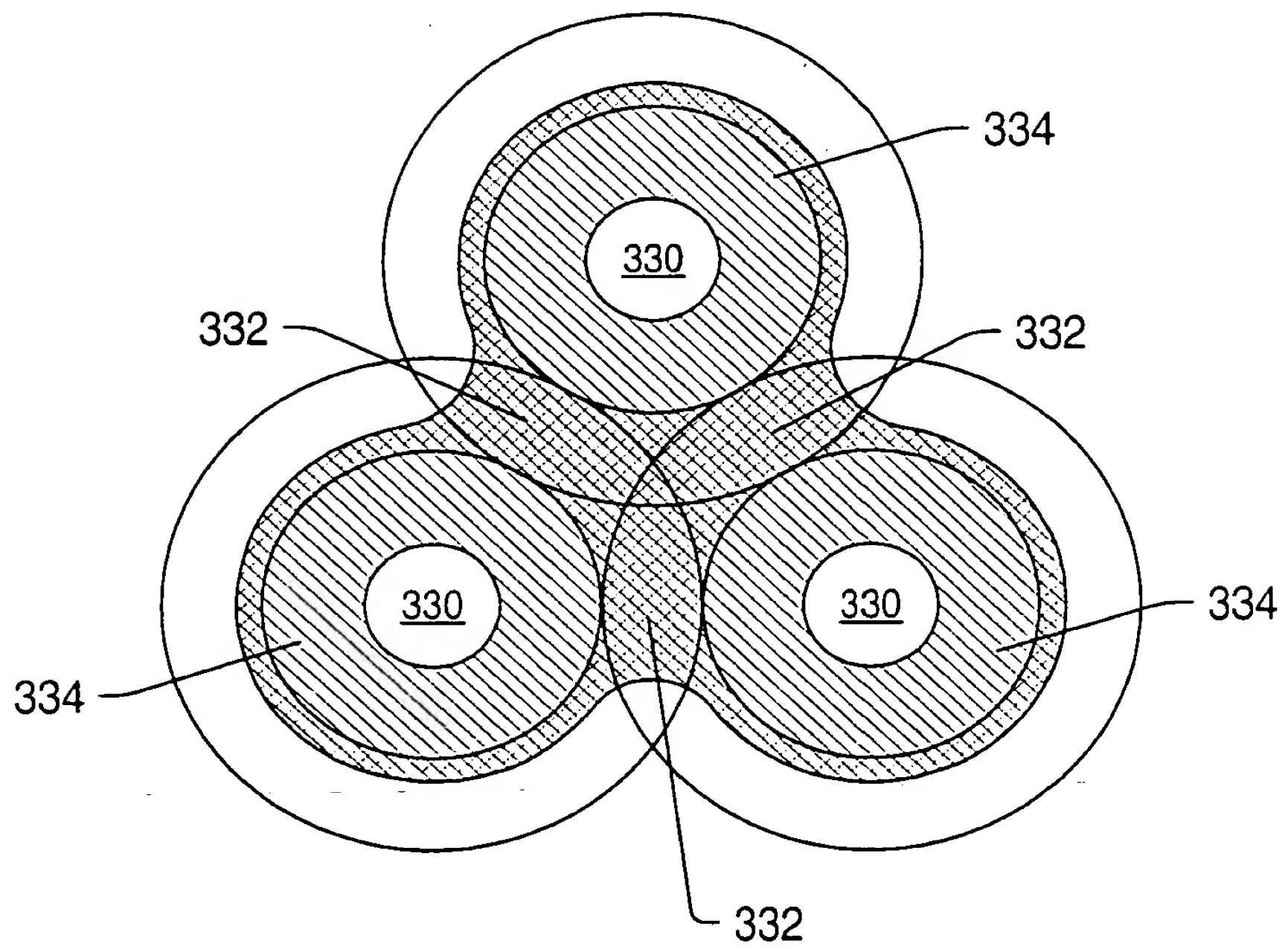


FIG. 7



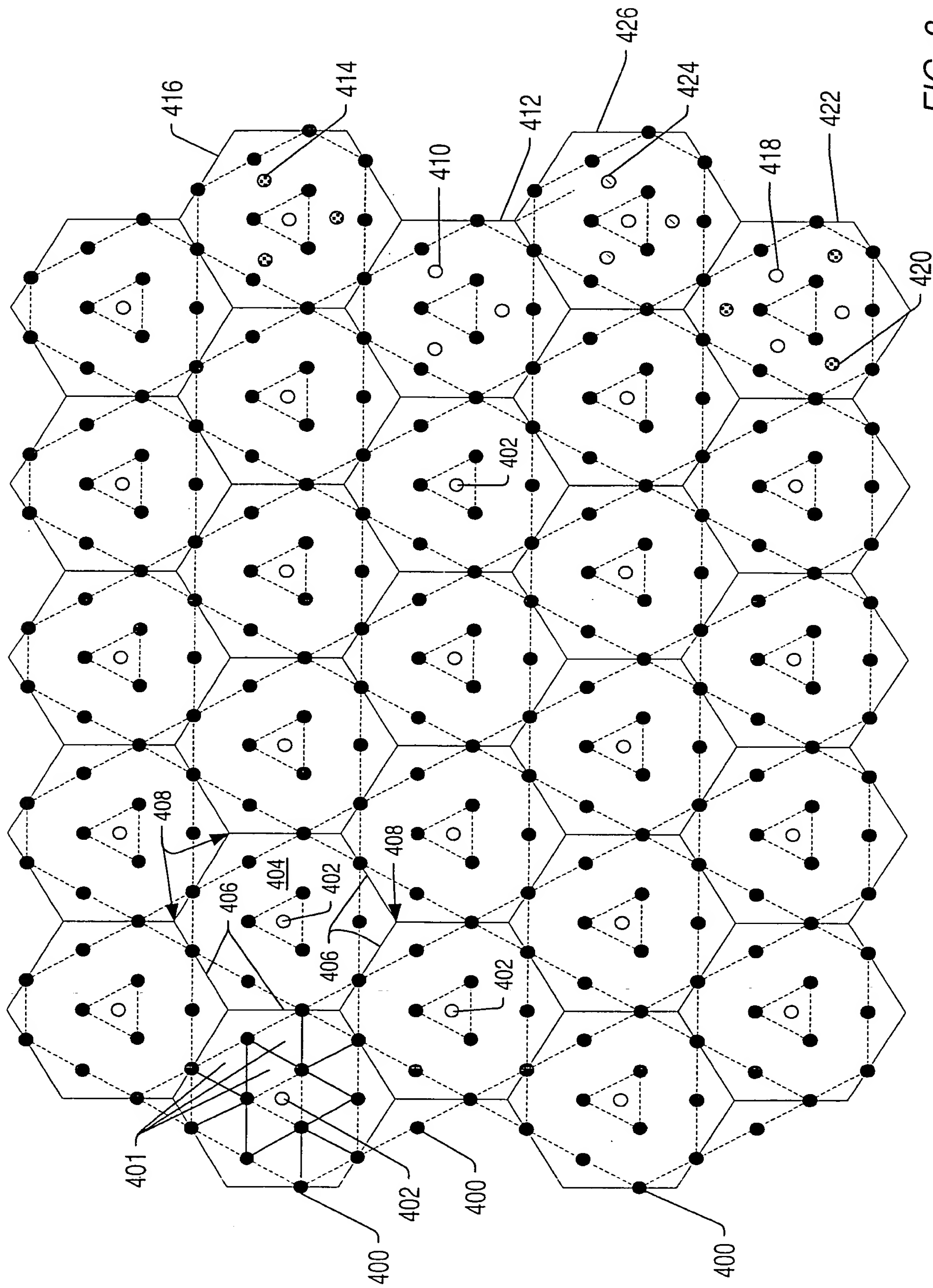


FIG. 8



FIG. 9

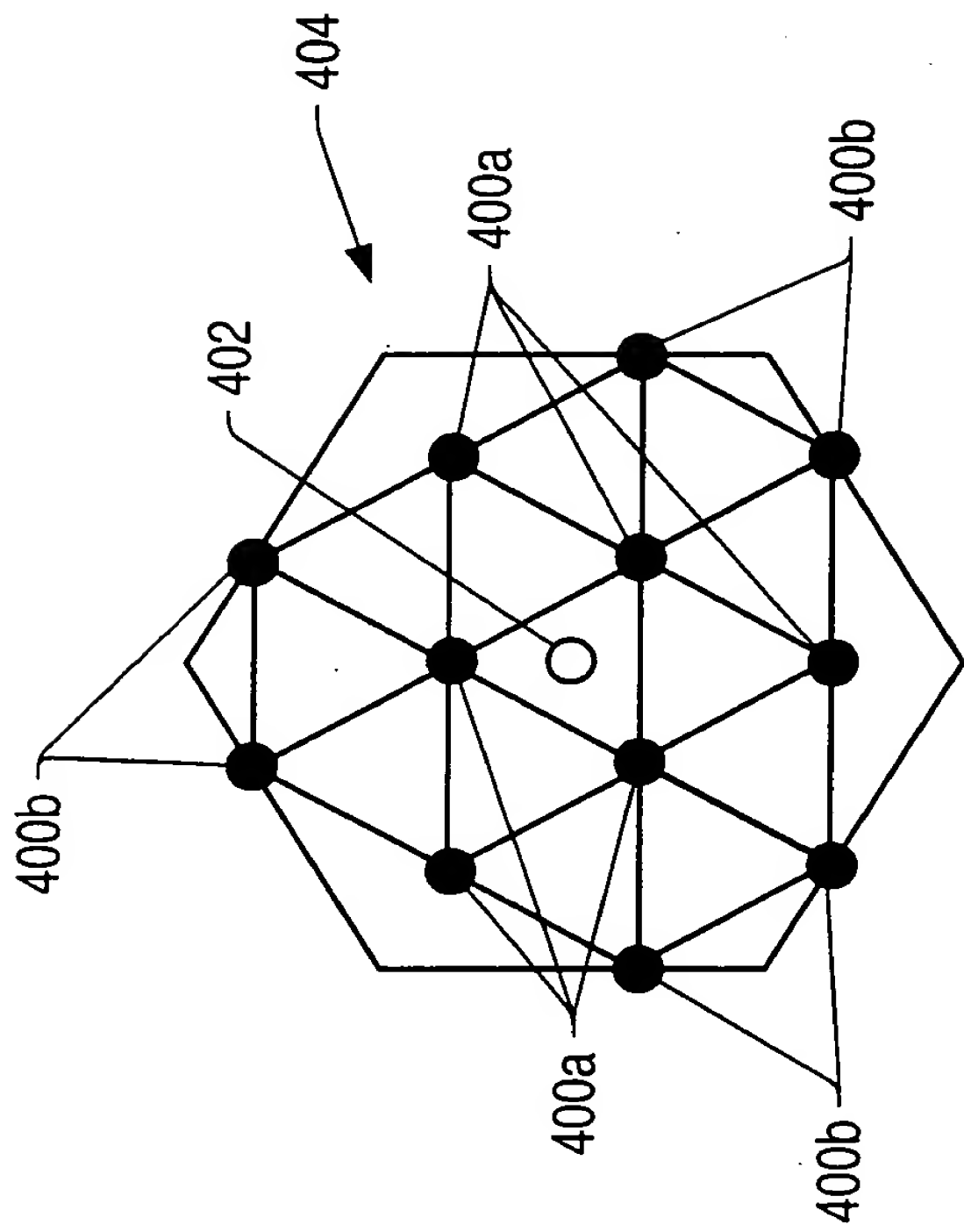


FIG. 9



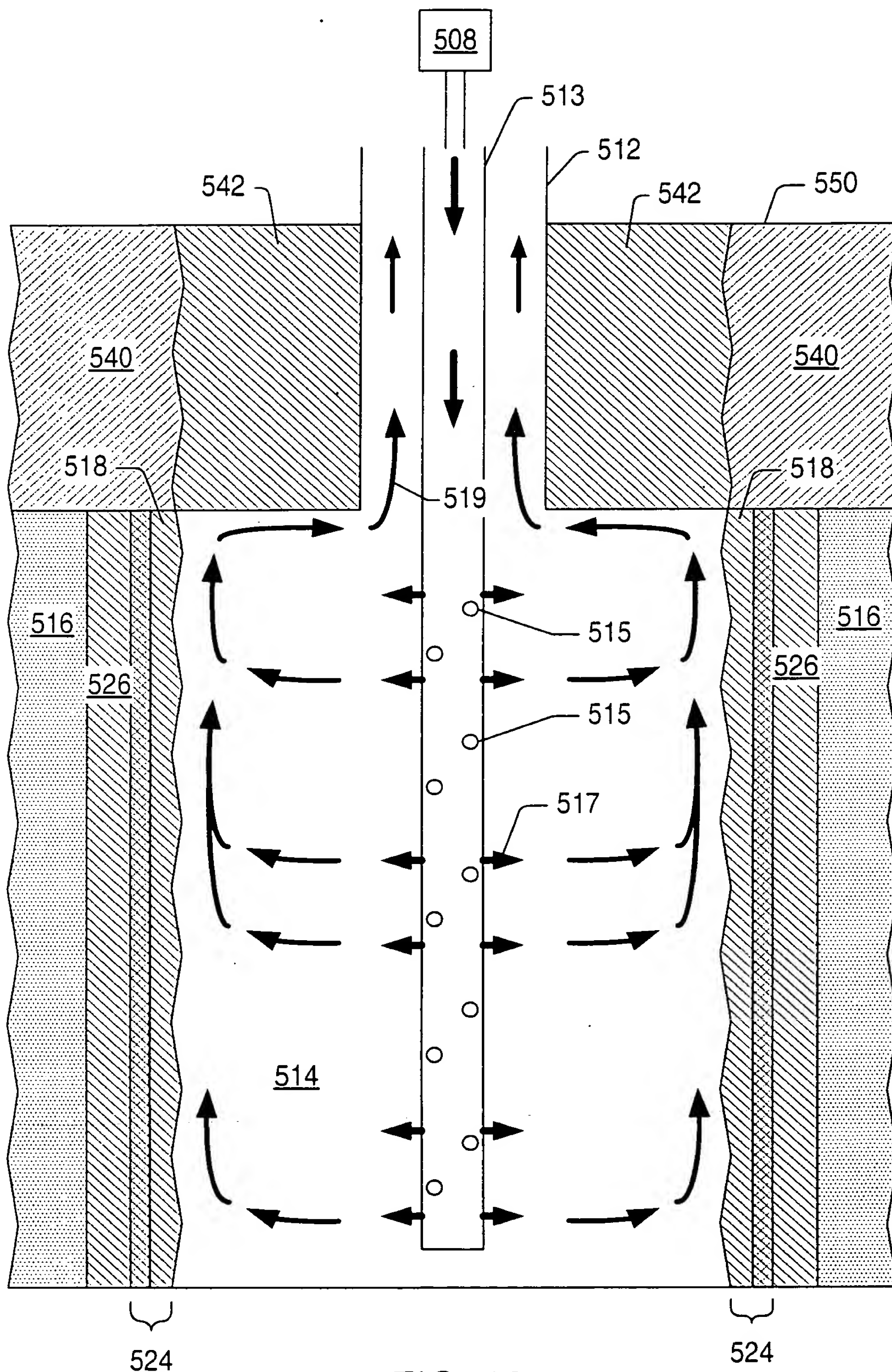


FIG. 10







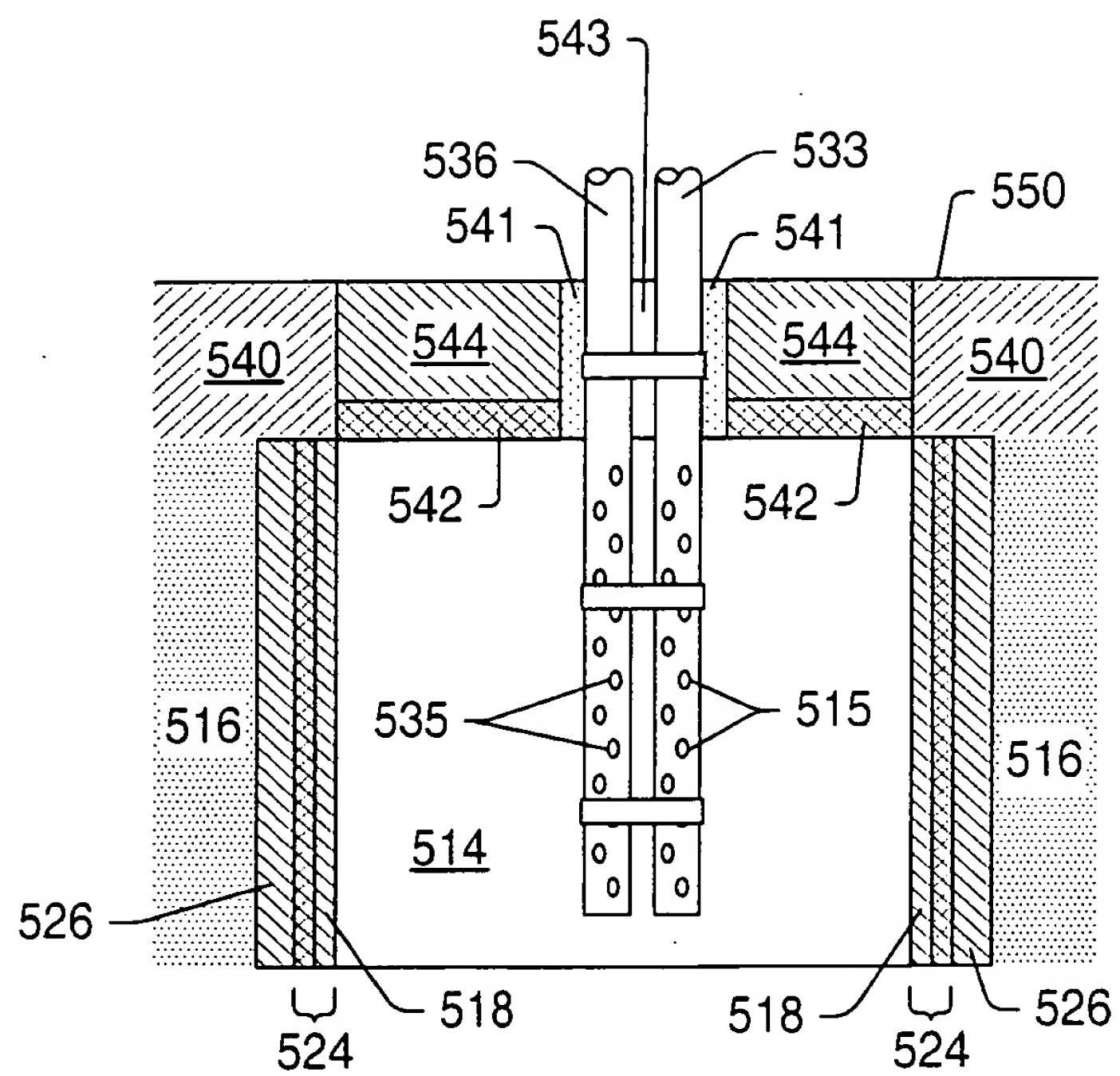


Fig. 13



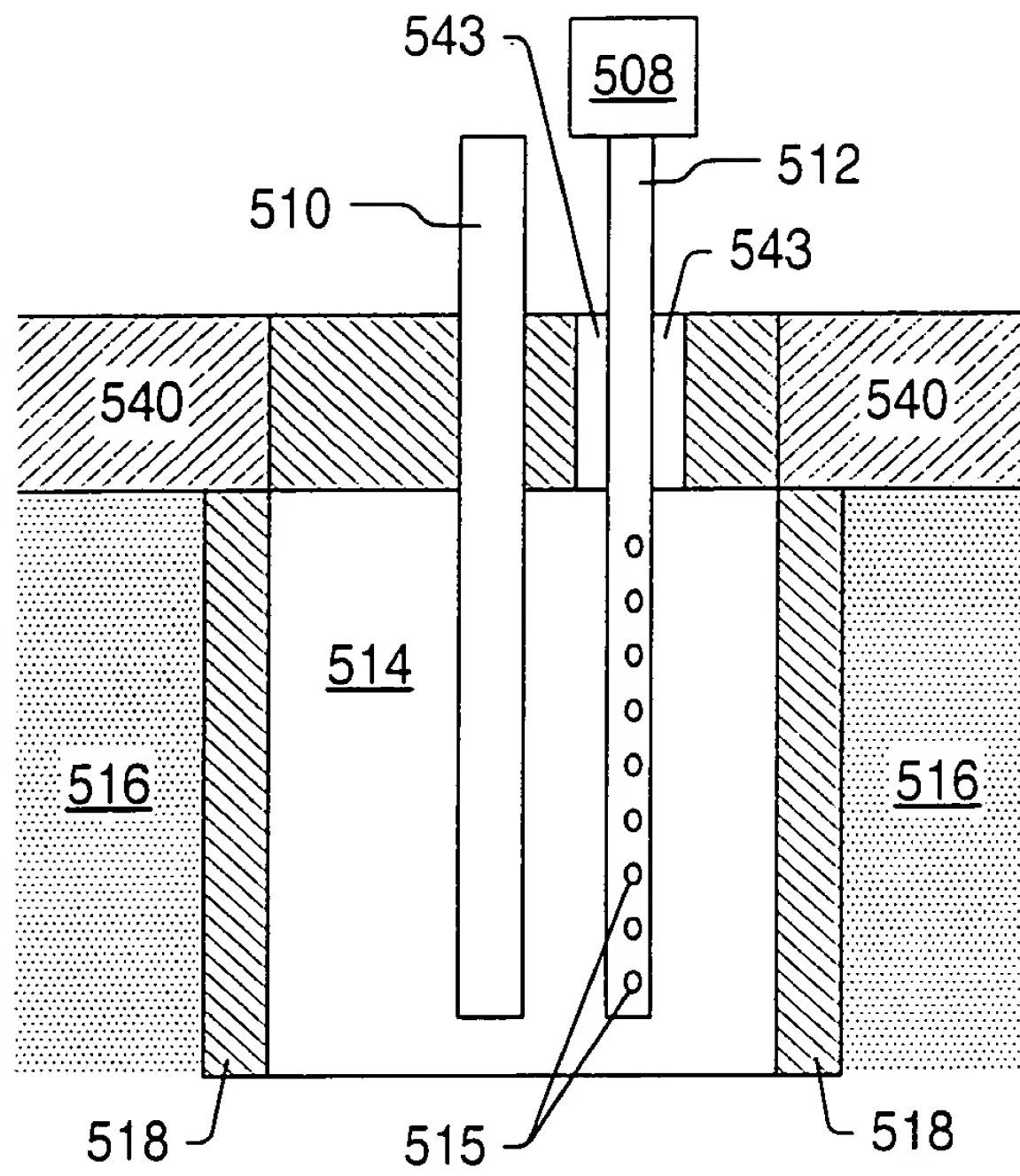


FIG. 14

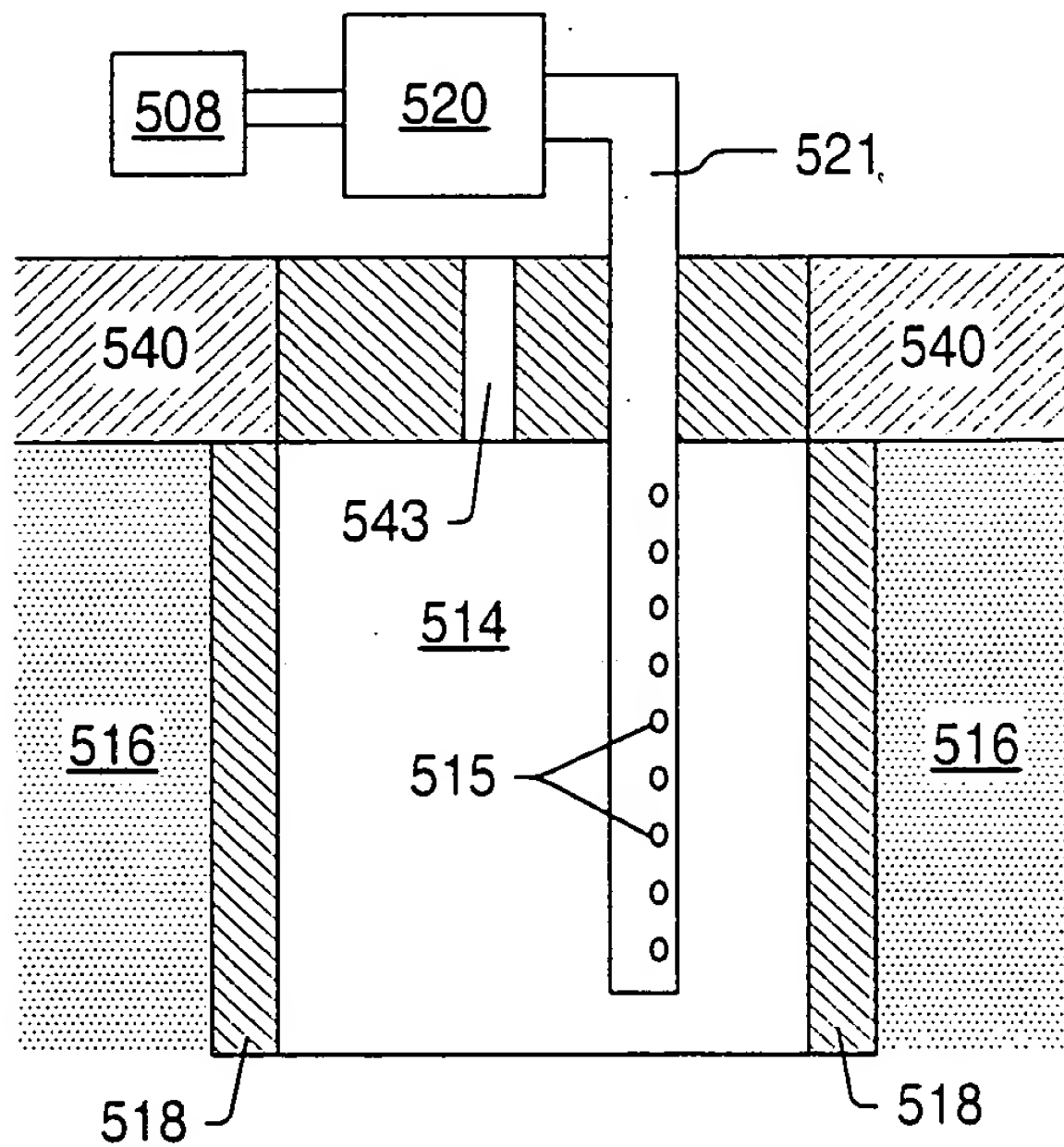


FIG. 15



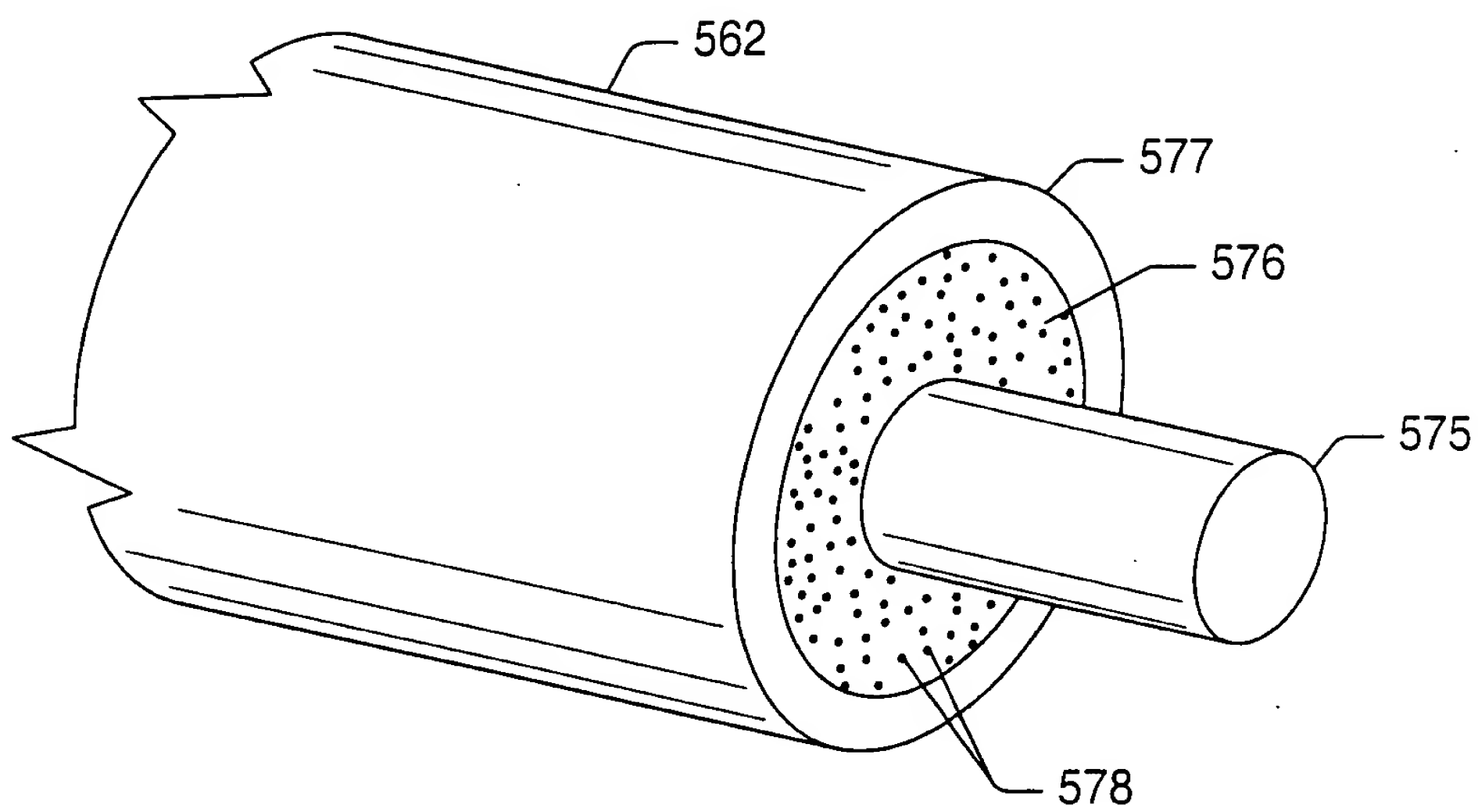


FIG. 16



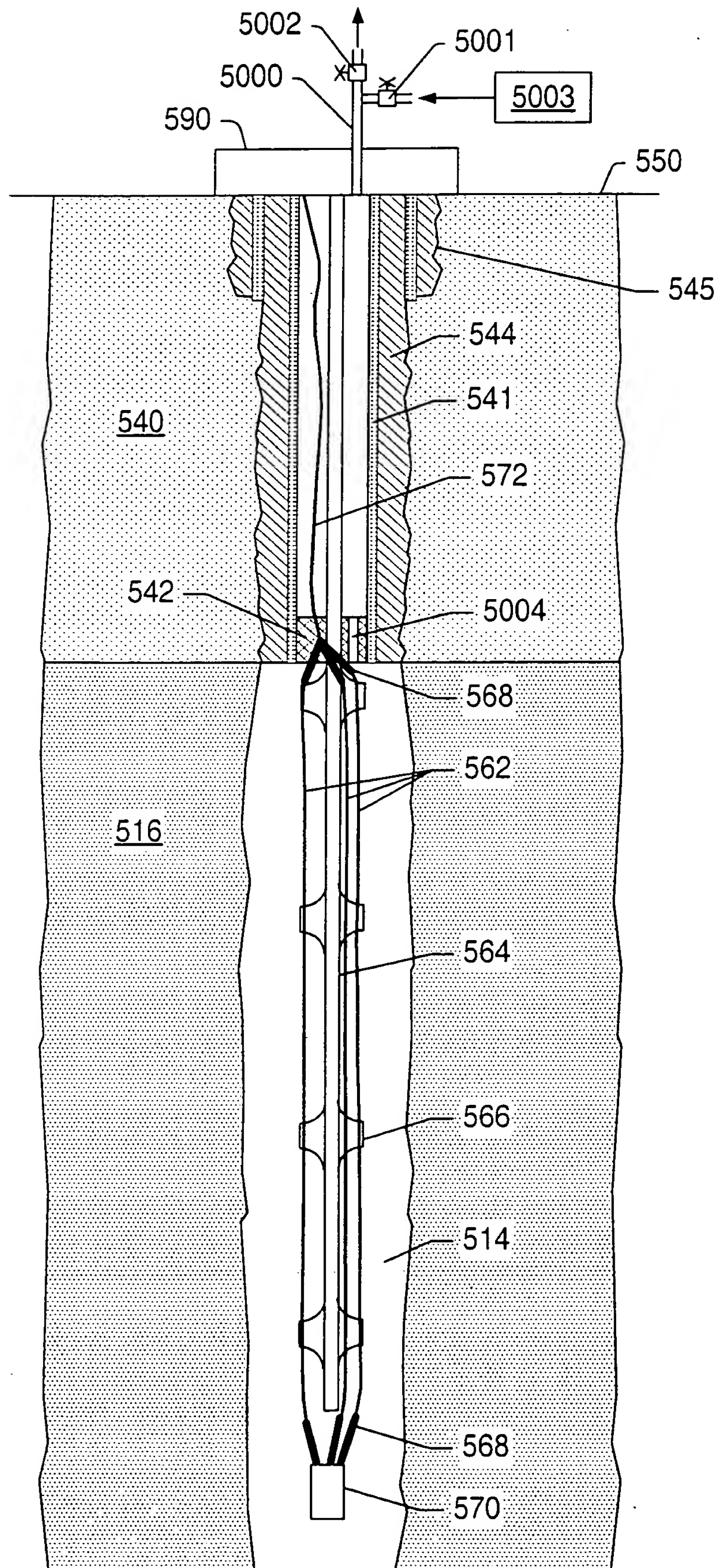


FIG. 17

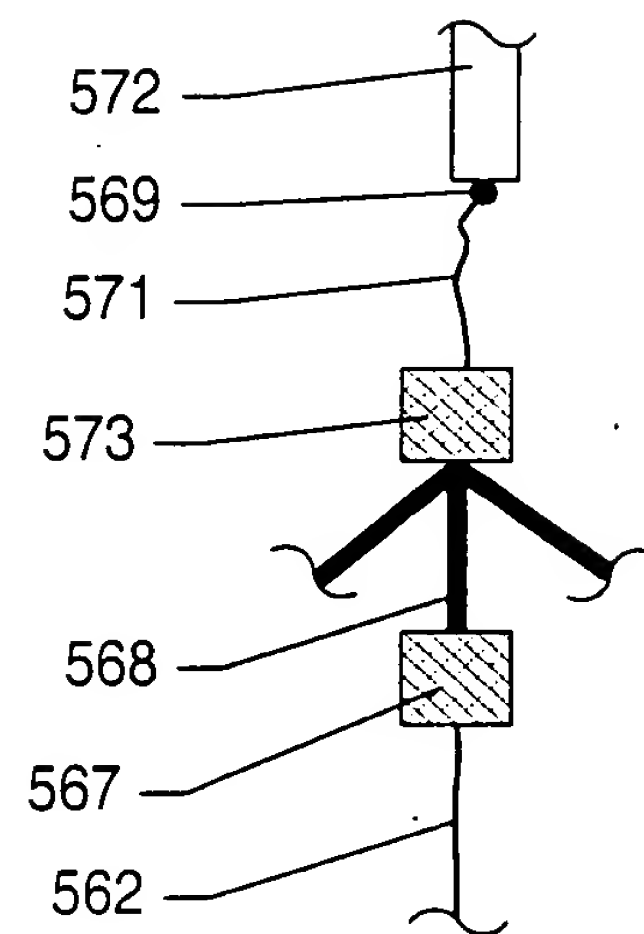


FIG. 17A



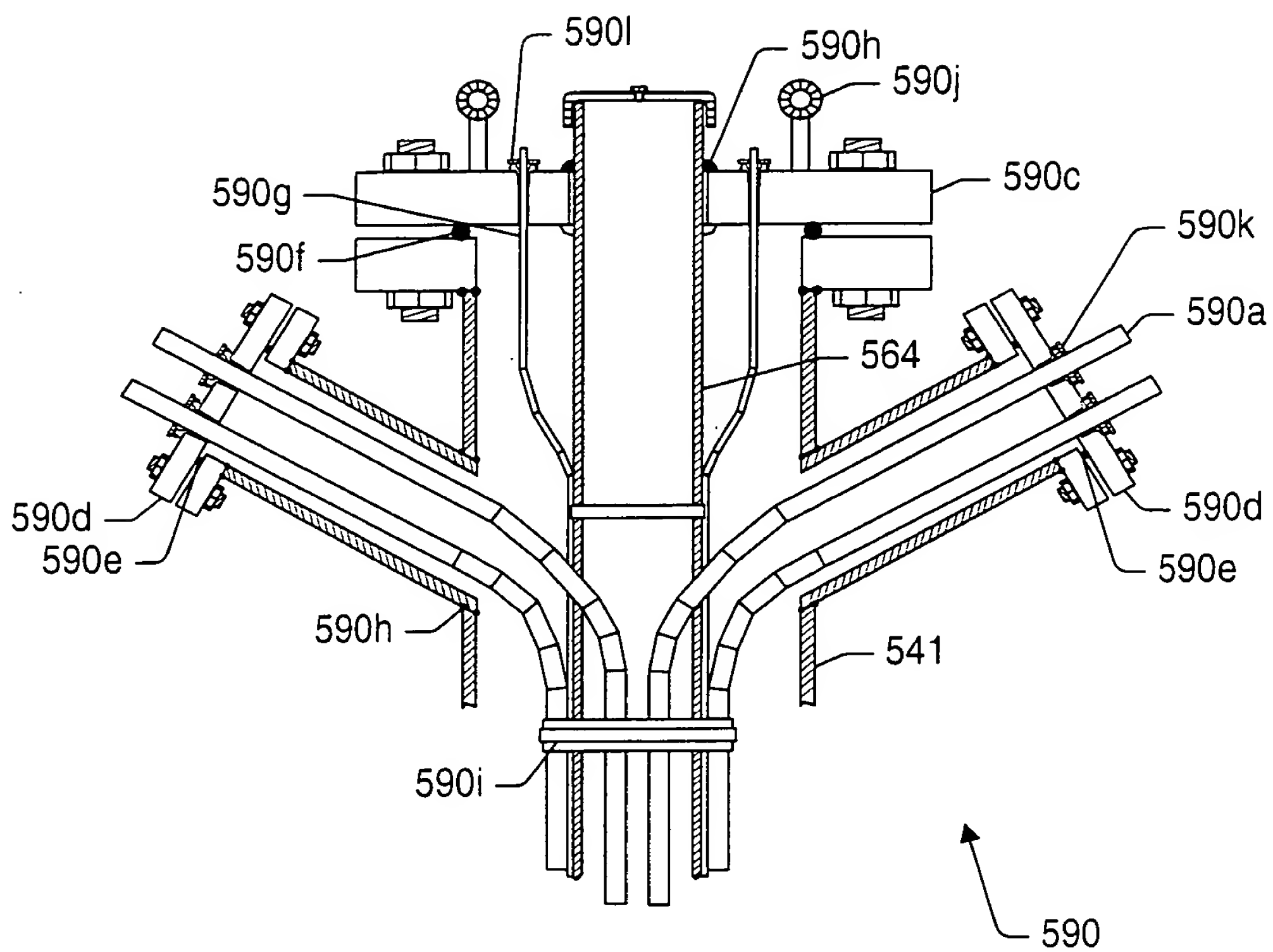


FIG. 18



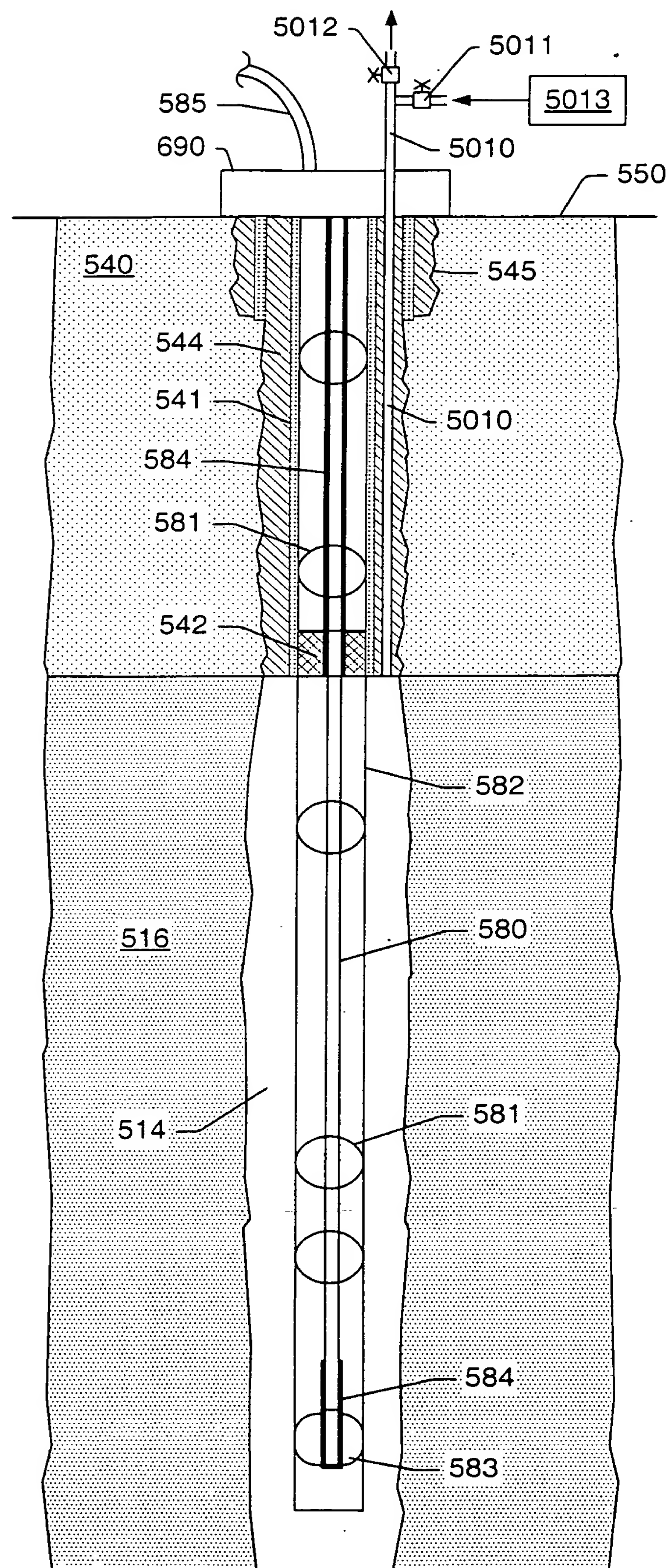


FIG. 19



FIG. 20

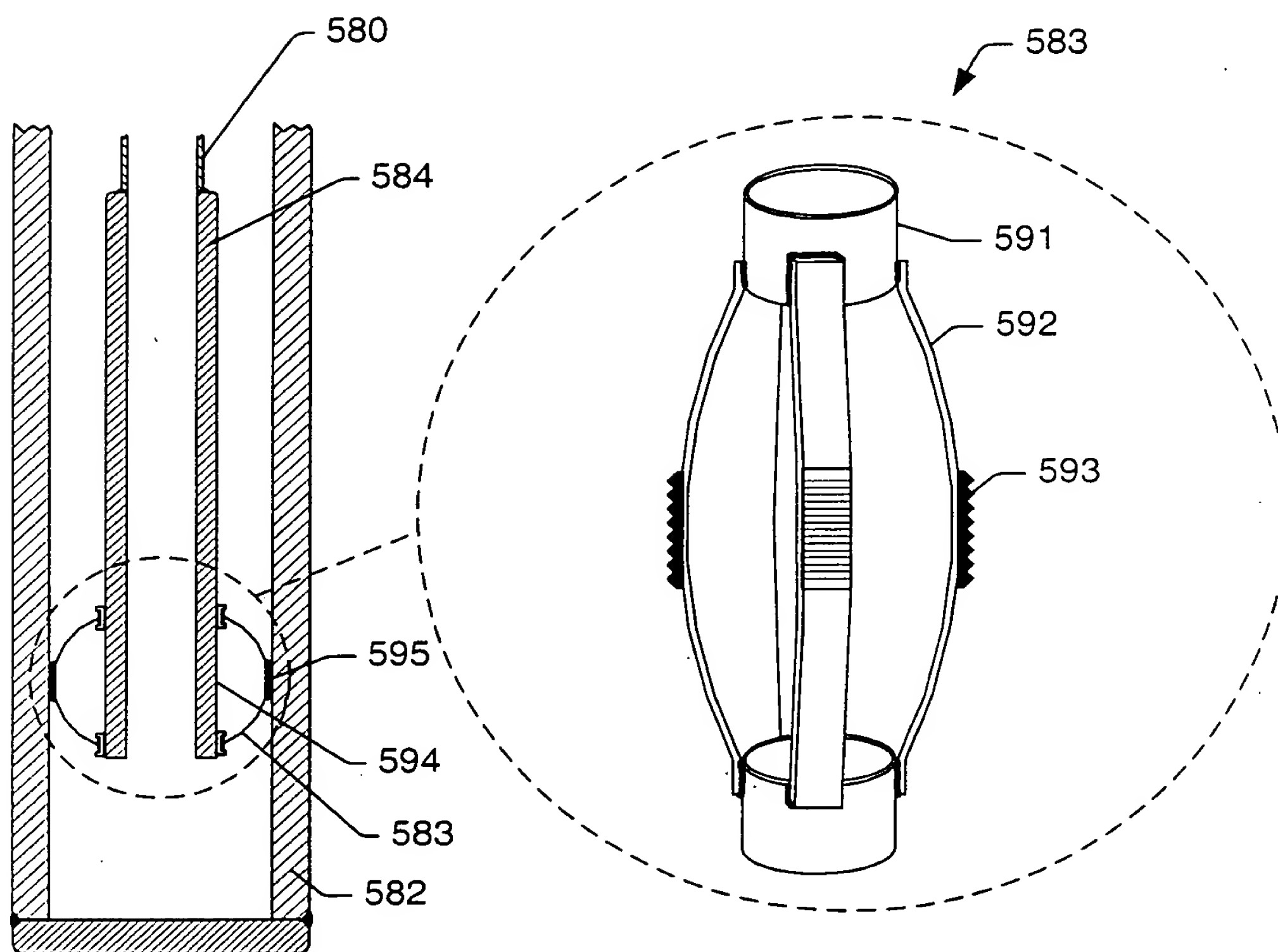


FIG. 20



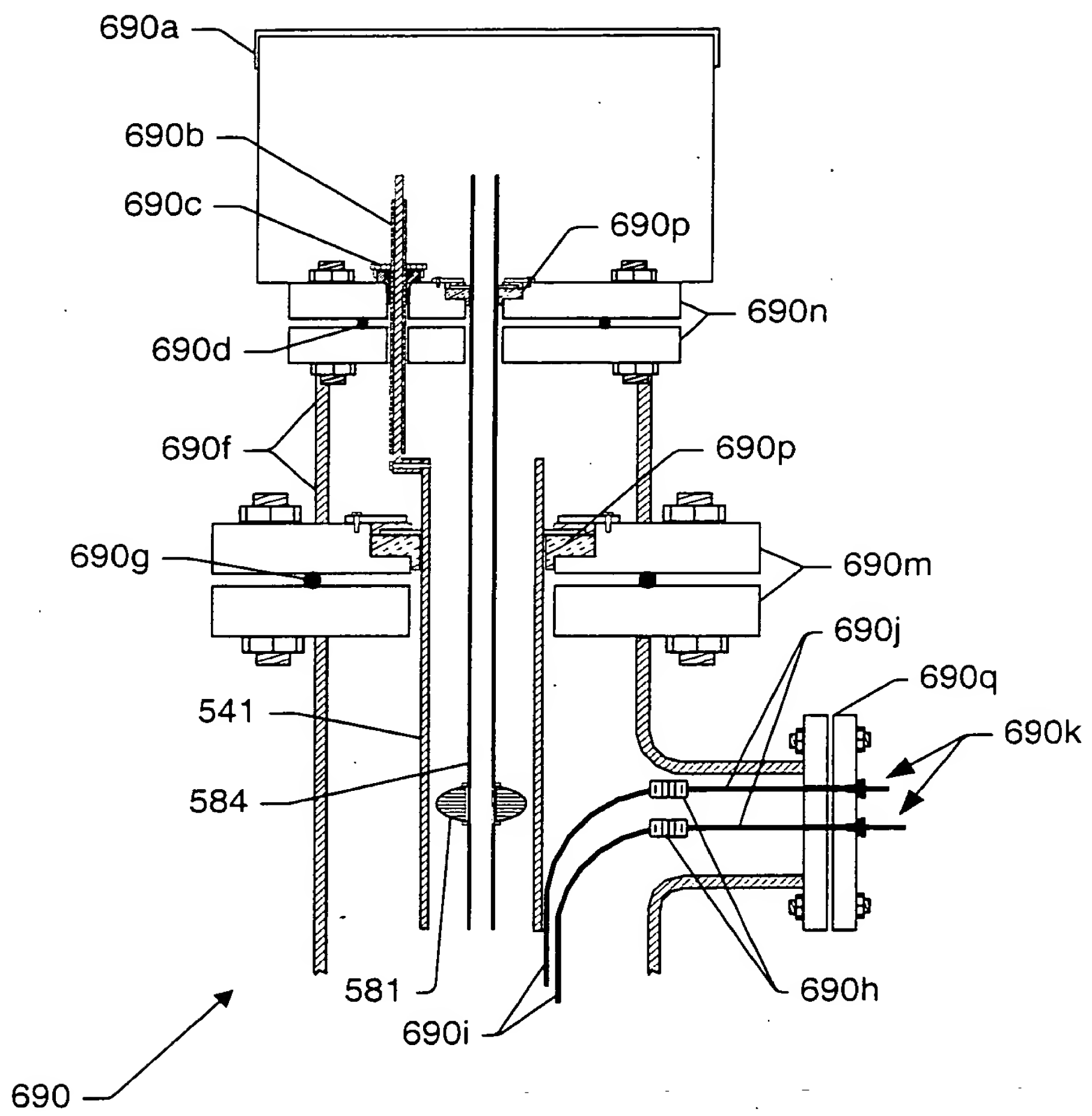


FIG. 21







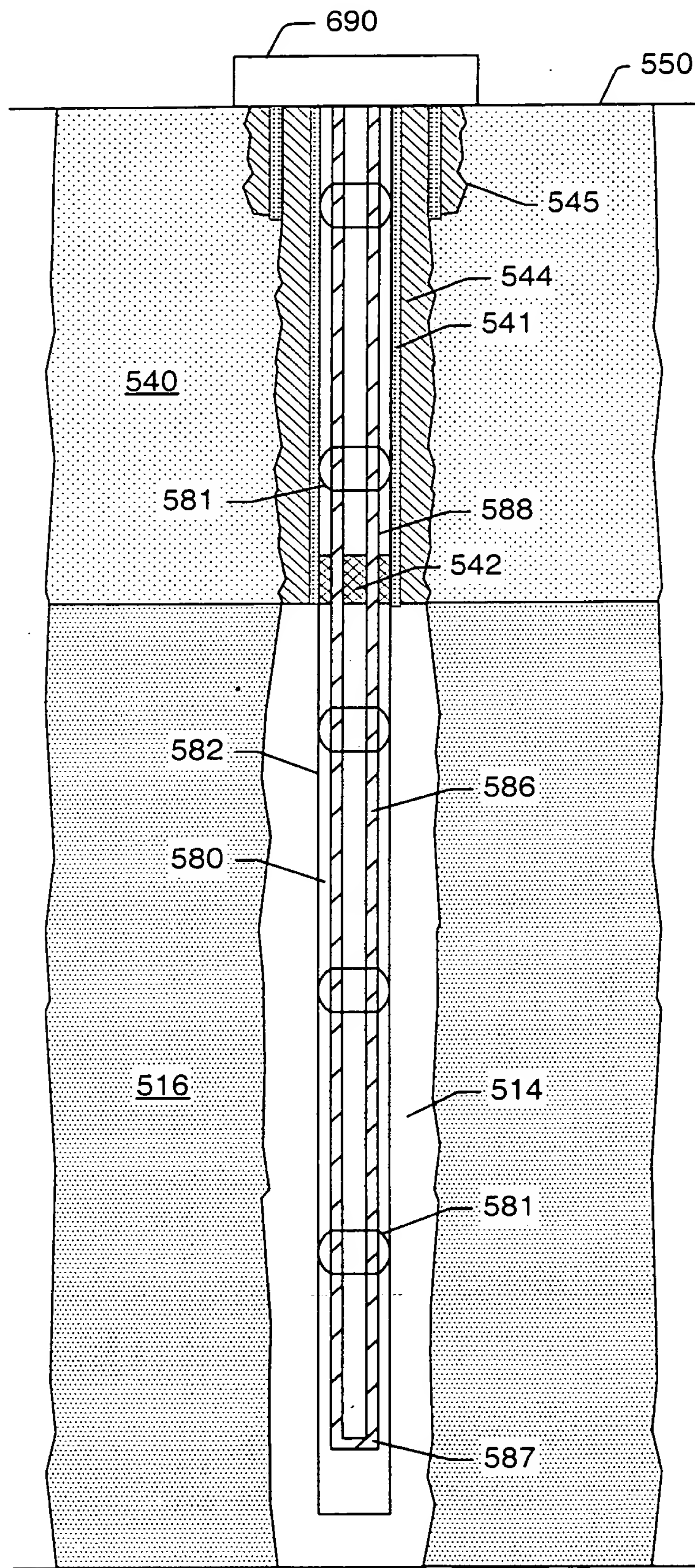


Fig. 24



FIG. 25 is a cross-sectional view of a wellbore completion system installed in a wellbore. The system includes a central tube 508, a packer 545, and a wellbore 550. The wellbore is divided into two zones, 540 and 516, by a horizontal line. The upper zone 540 contains two perforated sections 606 and 581, and a filter 572. The lower zone 516 contains a filter 604 and a wellbore 600. The system is supported by a wellbore 602 and a wellbore 605.

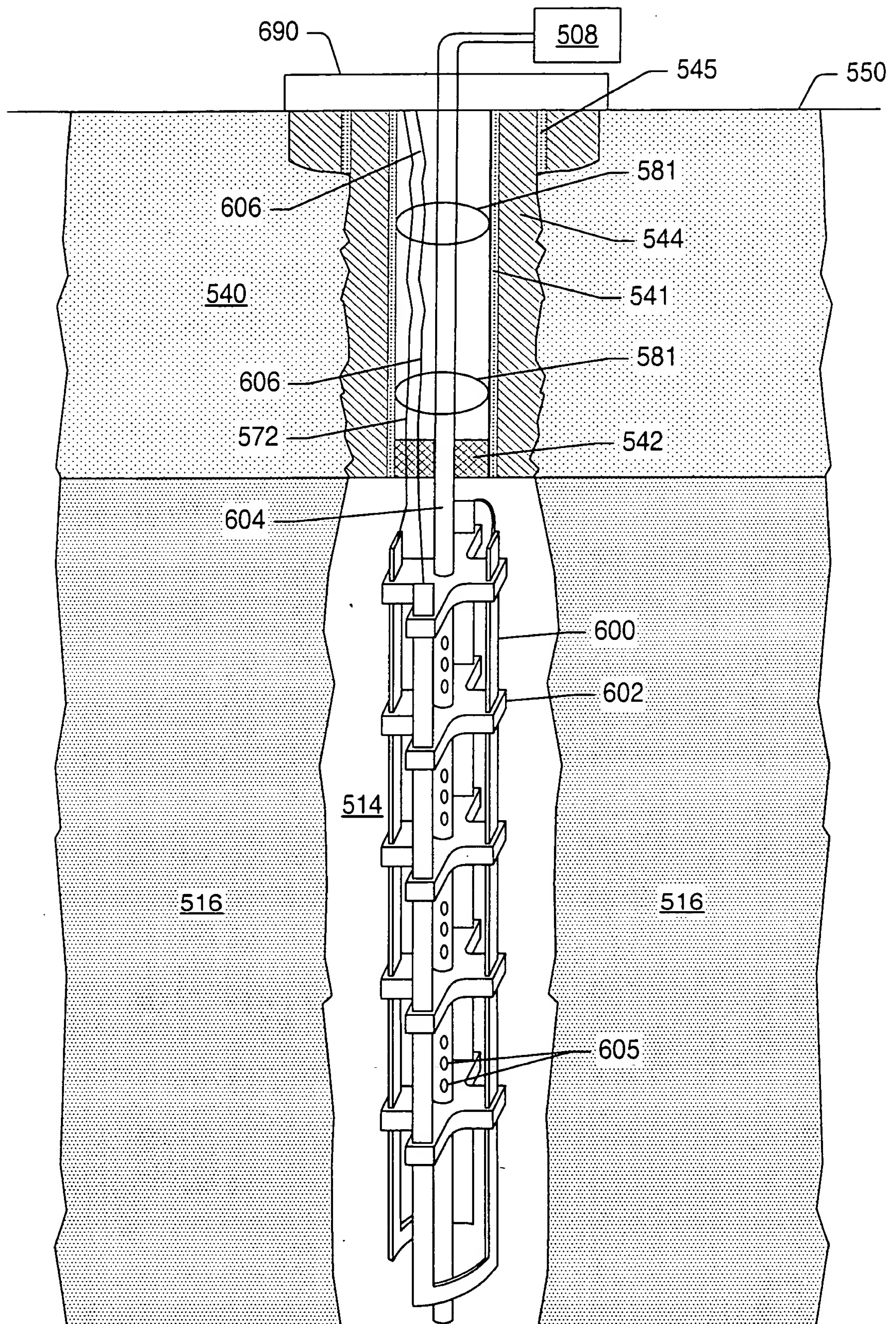


FIG. 25



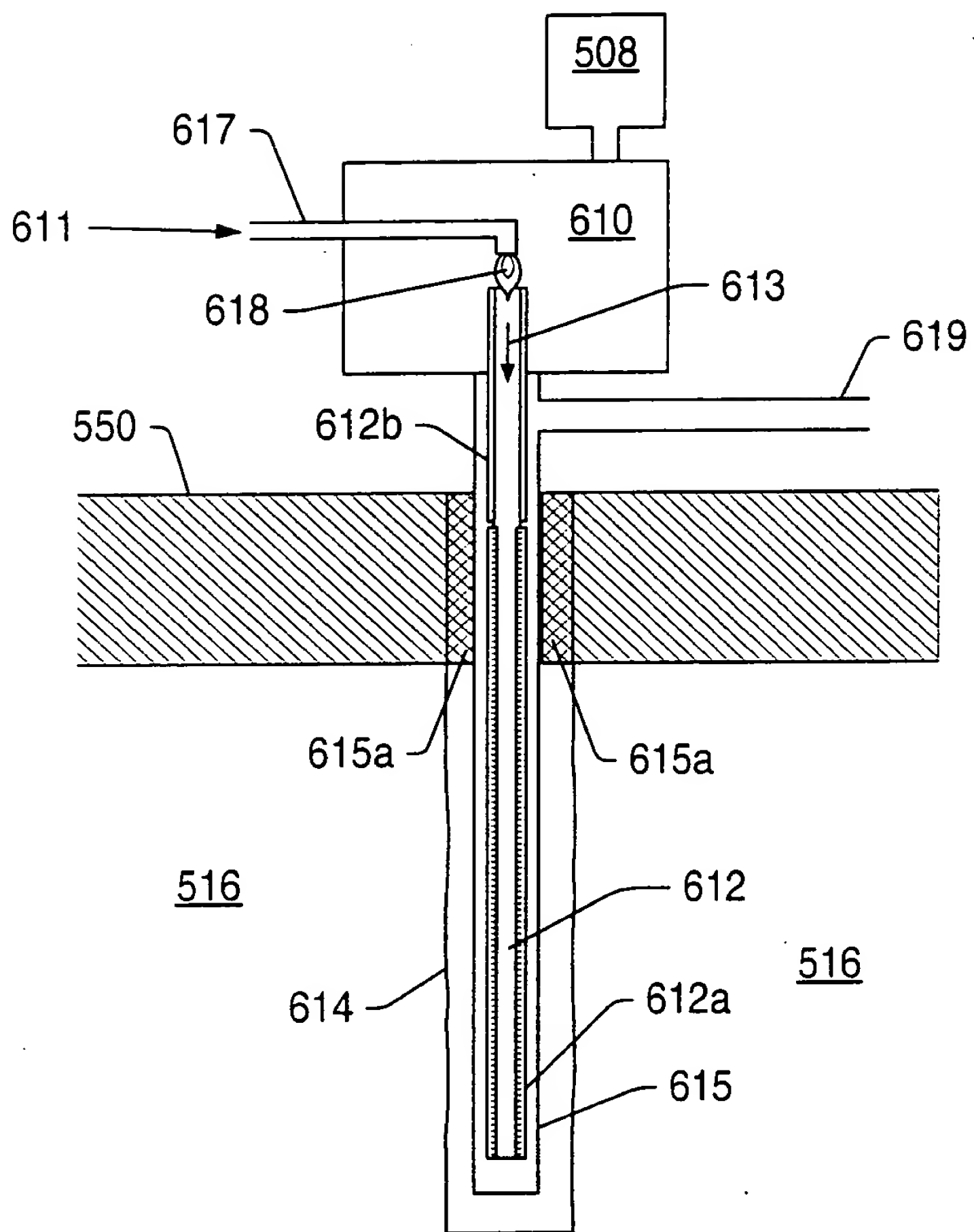


FIG. 26

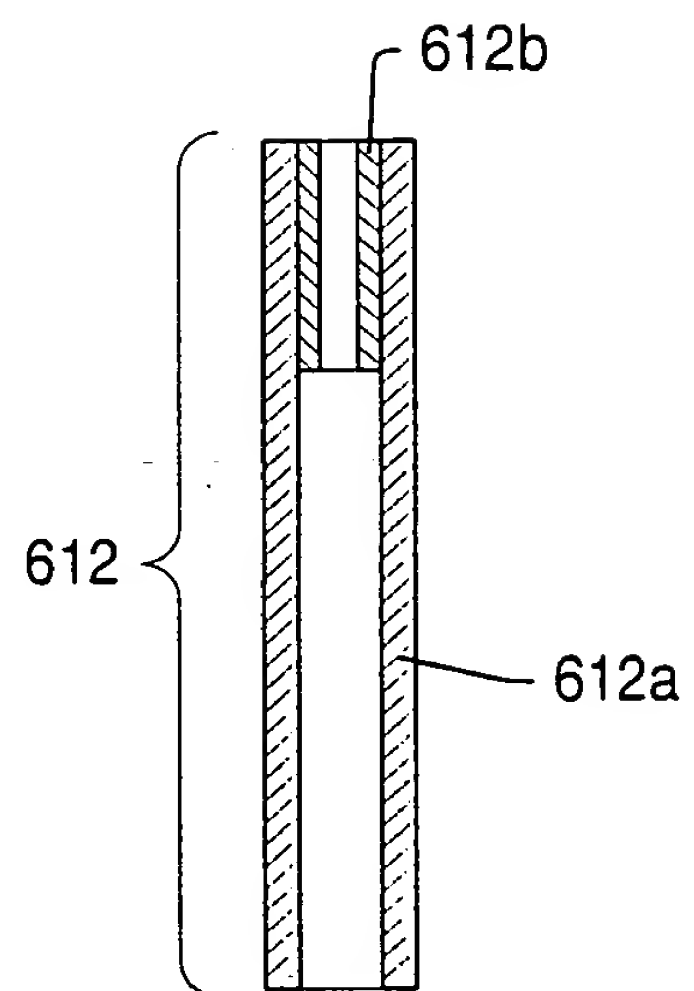


FIG. 27



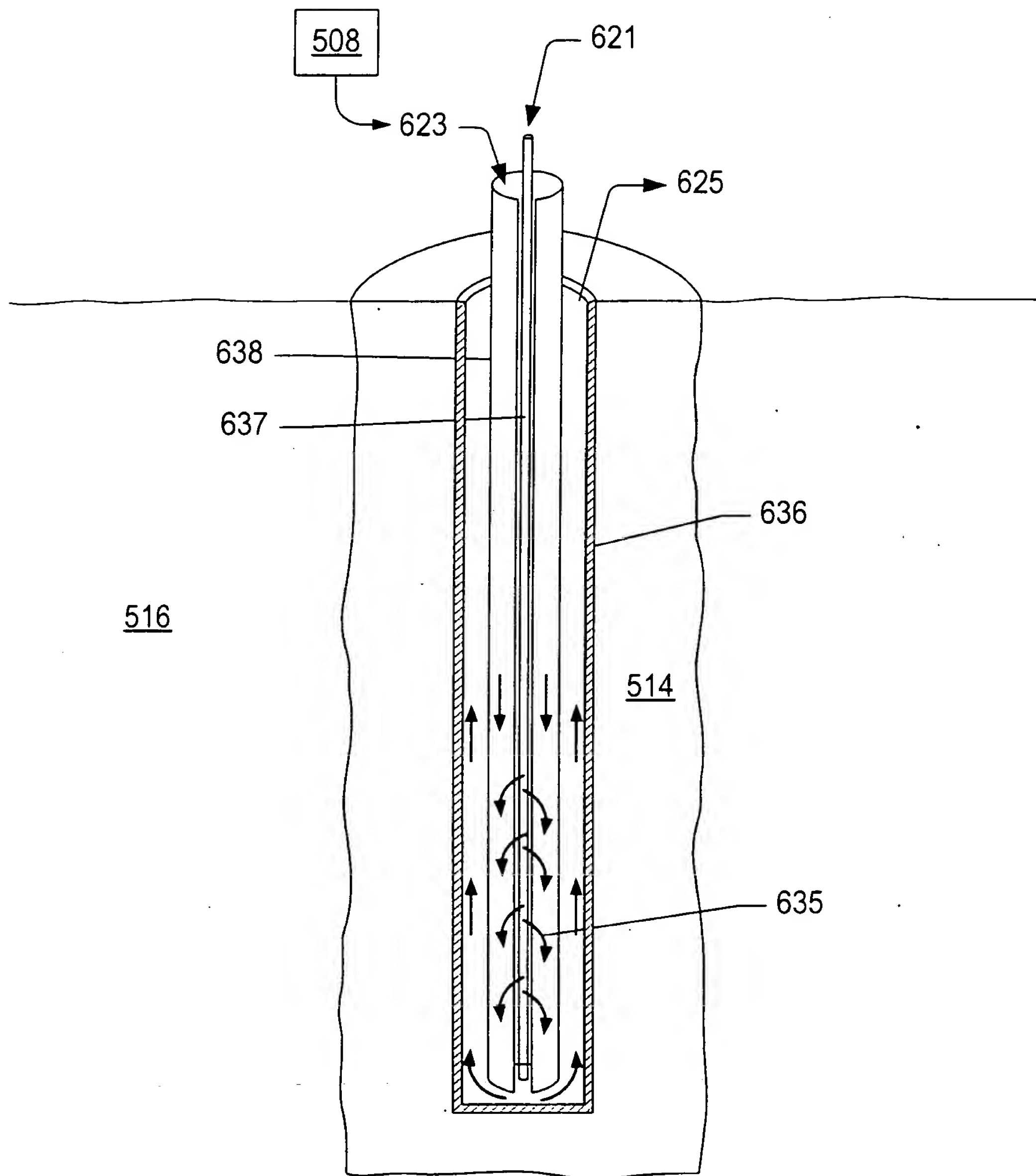


FIG. 28



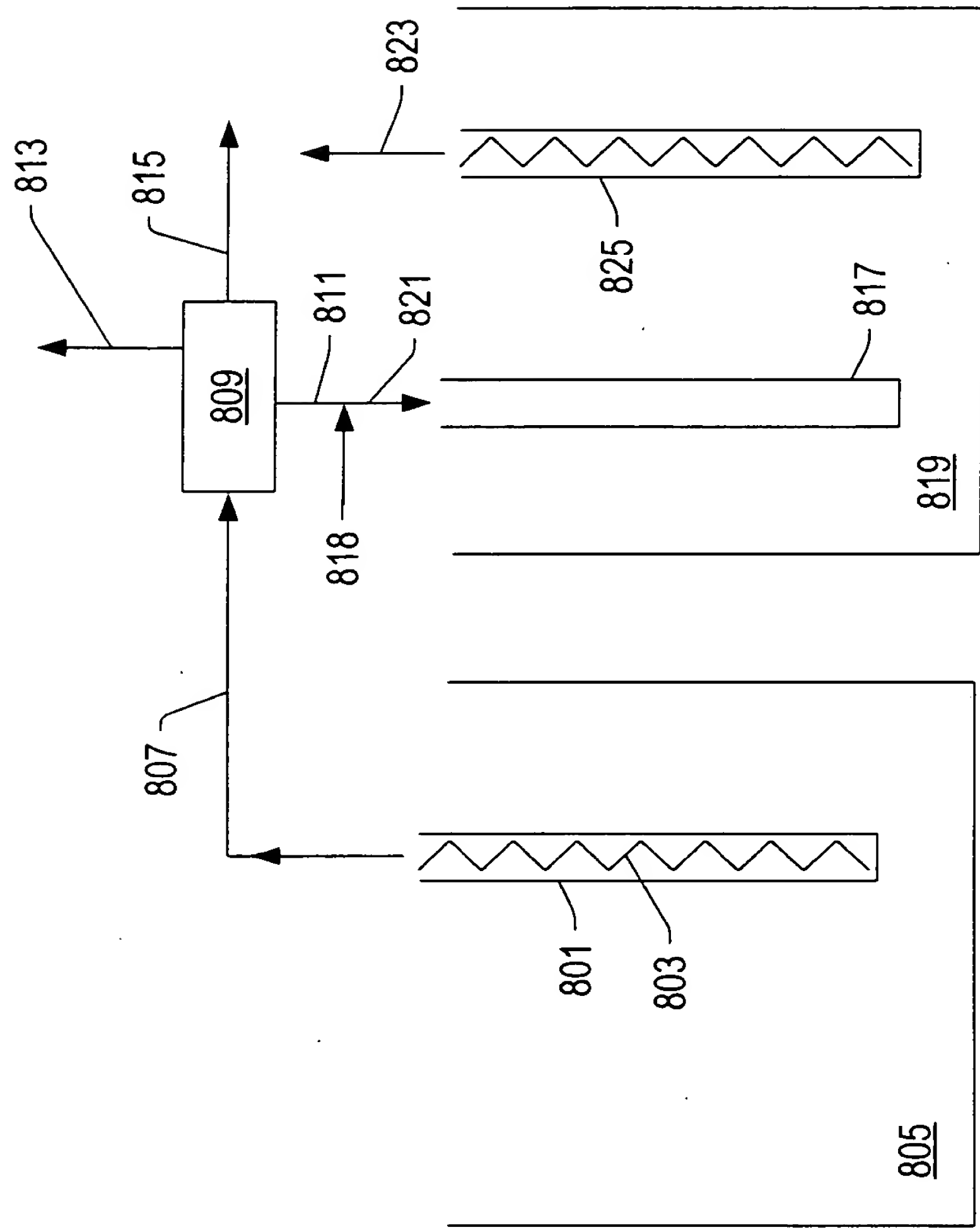


FIG. 29



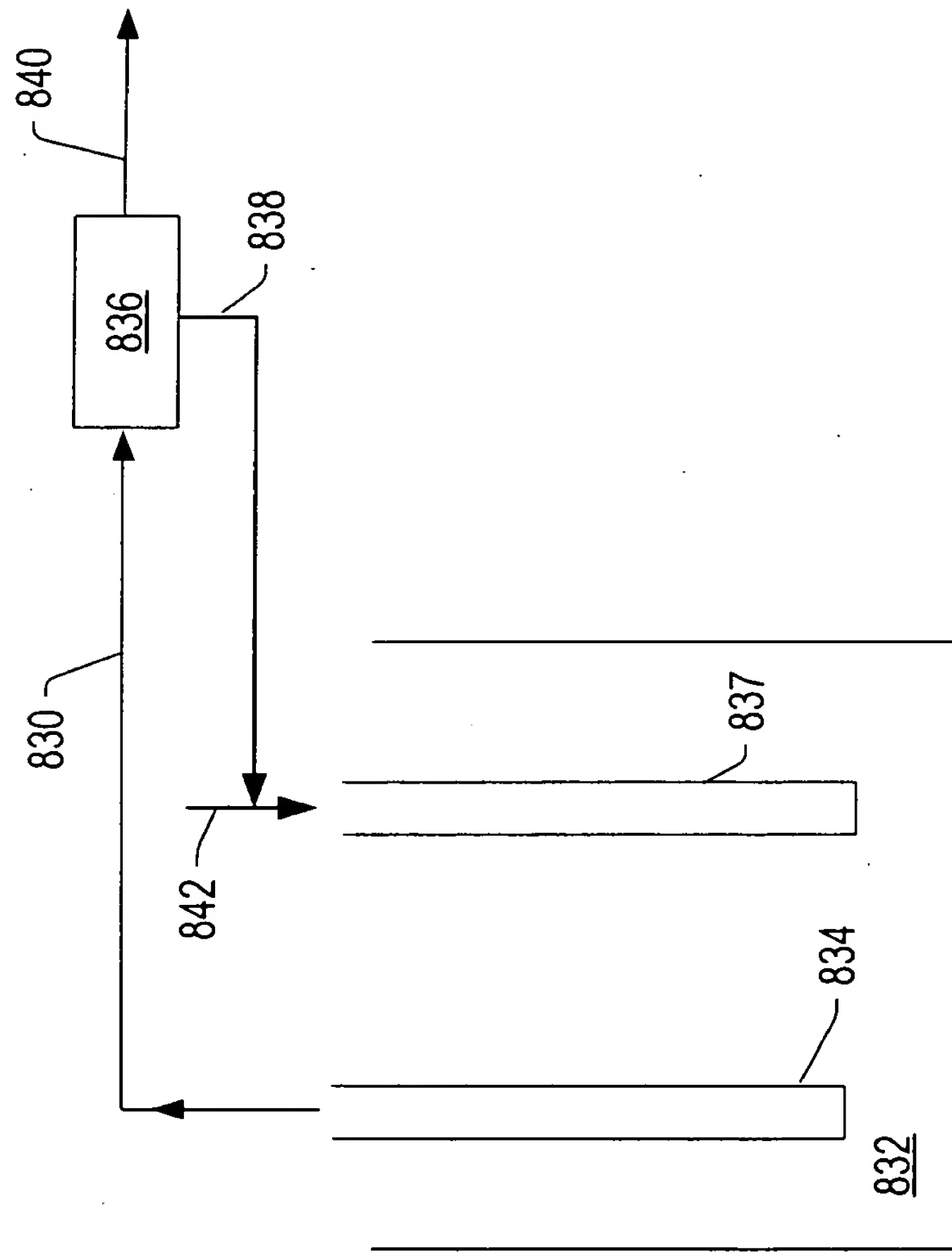


FIG. 30.



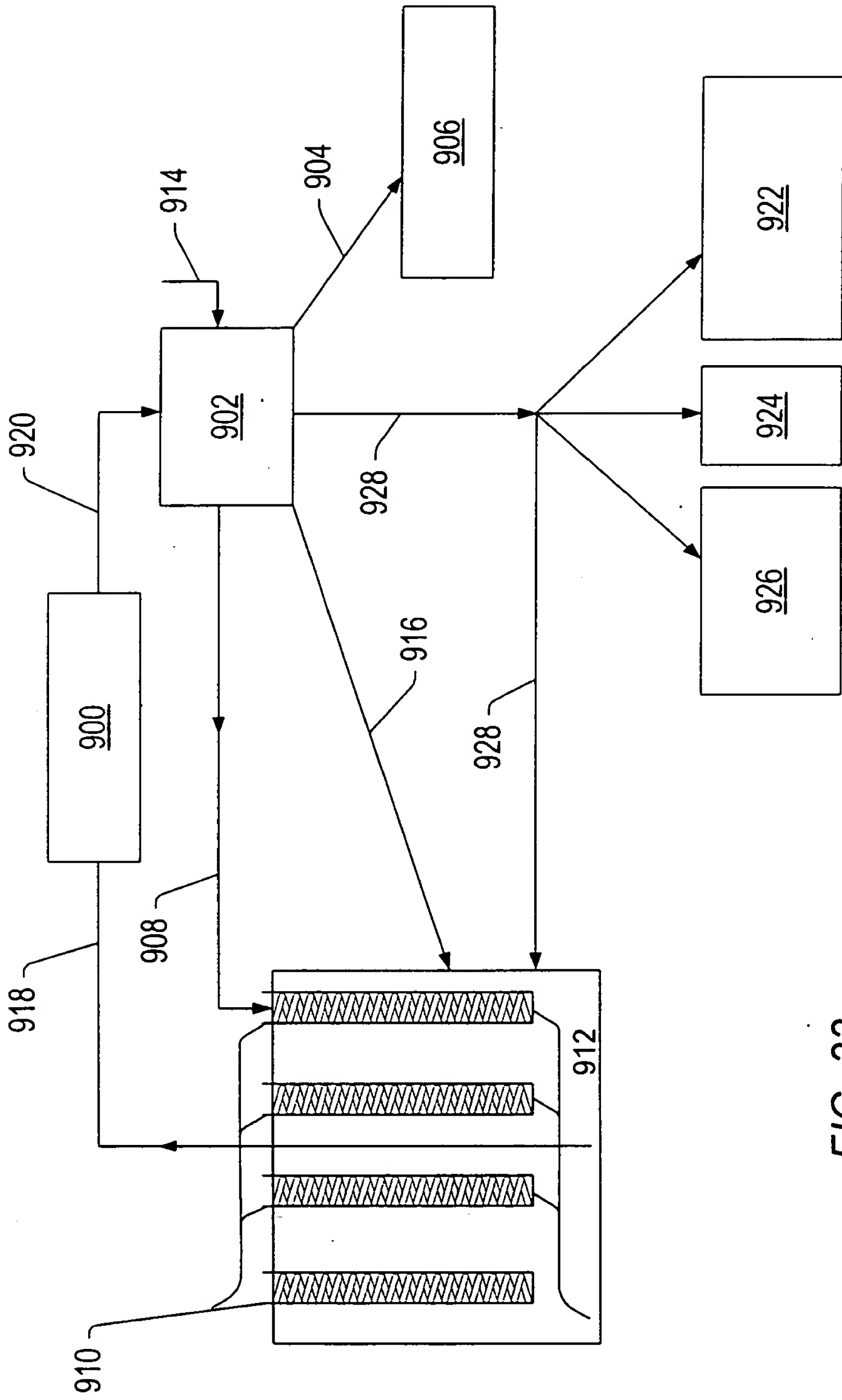


FIG. 33



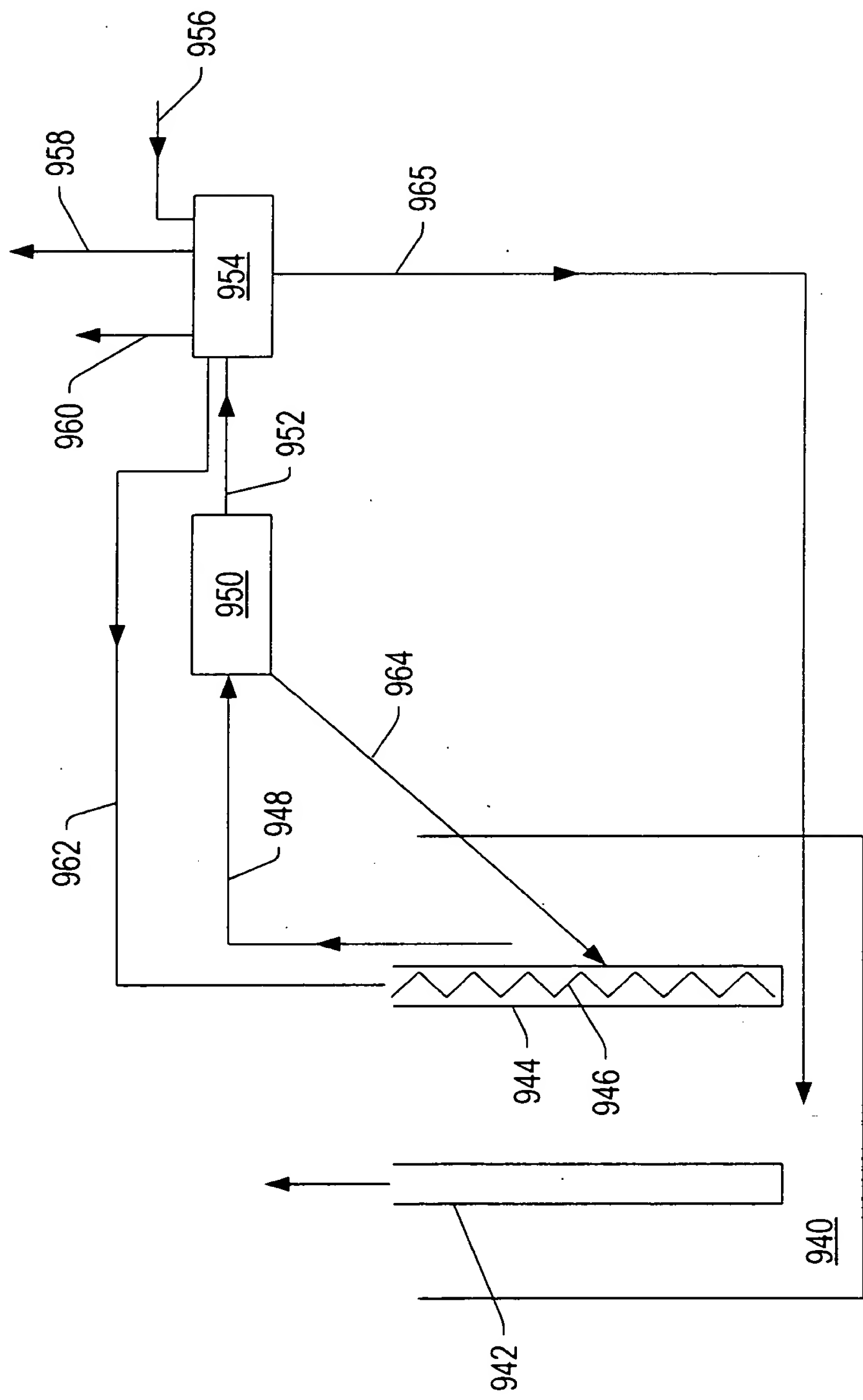




FIG. 35 is a schematic diagram of a system 1000 for processing a material 976. The system 1000 includes a material input 976, a material processing unit 984, a material output 980, a material storage unit 994, a material transport unit 996, a material control unit 998, and a material monitoring unit 1002. The material 976 is input into the material processing unit 984, which is connected to the material output 980. The material processing unit 984 is also connected to the material storage unit 994, which is connected to the material transport unit 996. The material transport unit 996 is connected to the material control unit 998, which is connected to the material monitoring unit 1002. The material monitoring unit 1002 is connected to the material input 976.

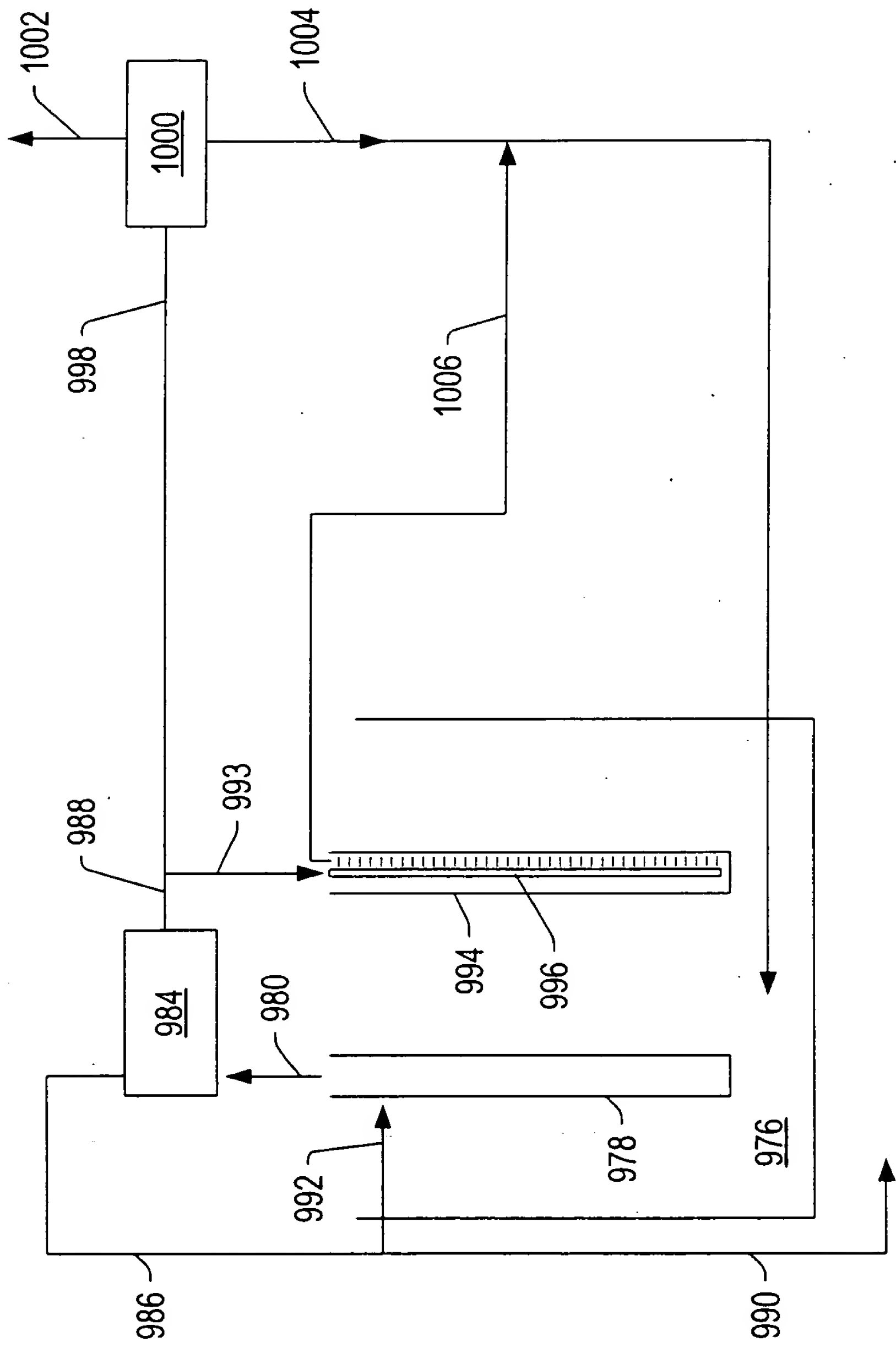


FIG. 35



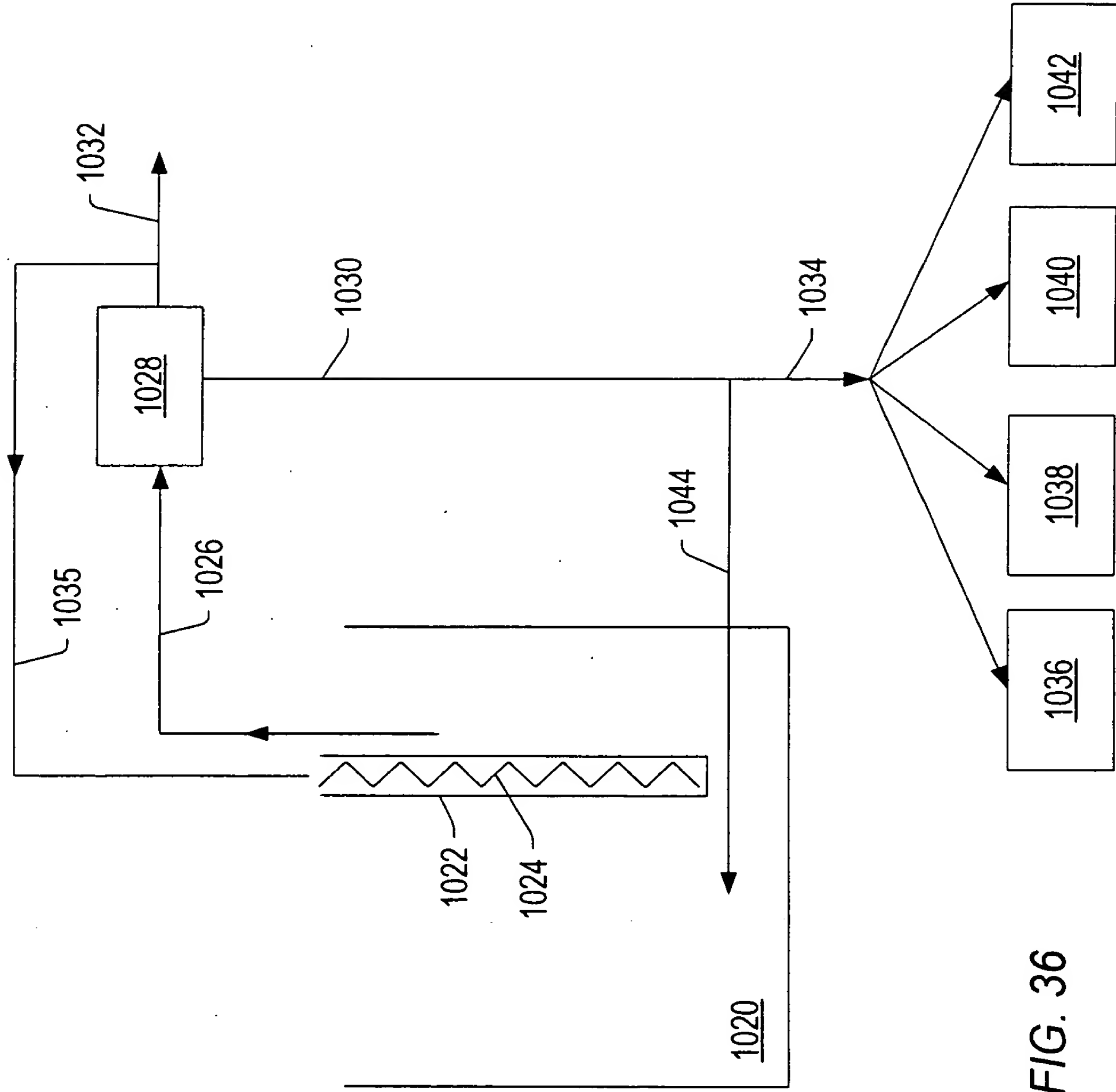


FIG. 36



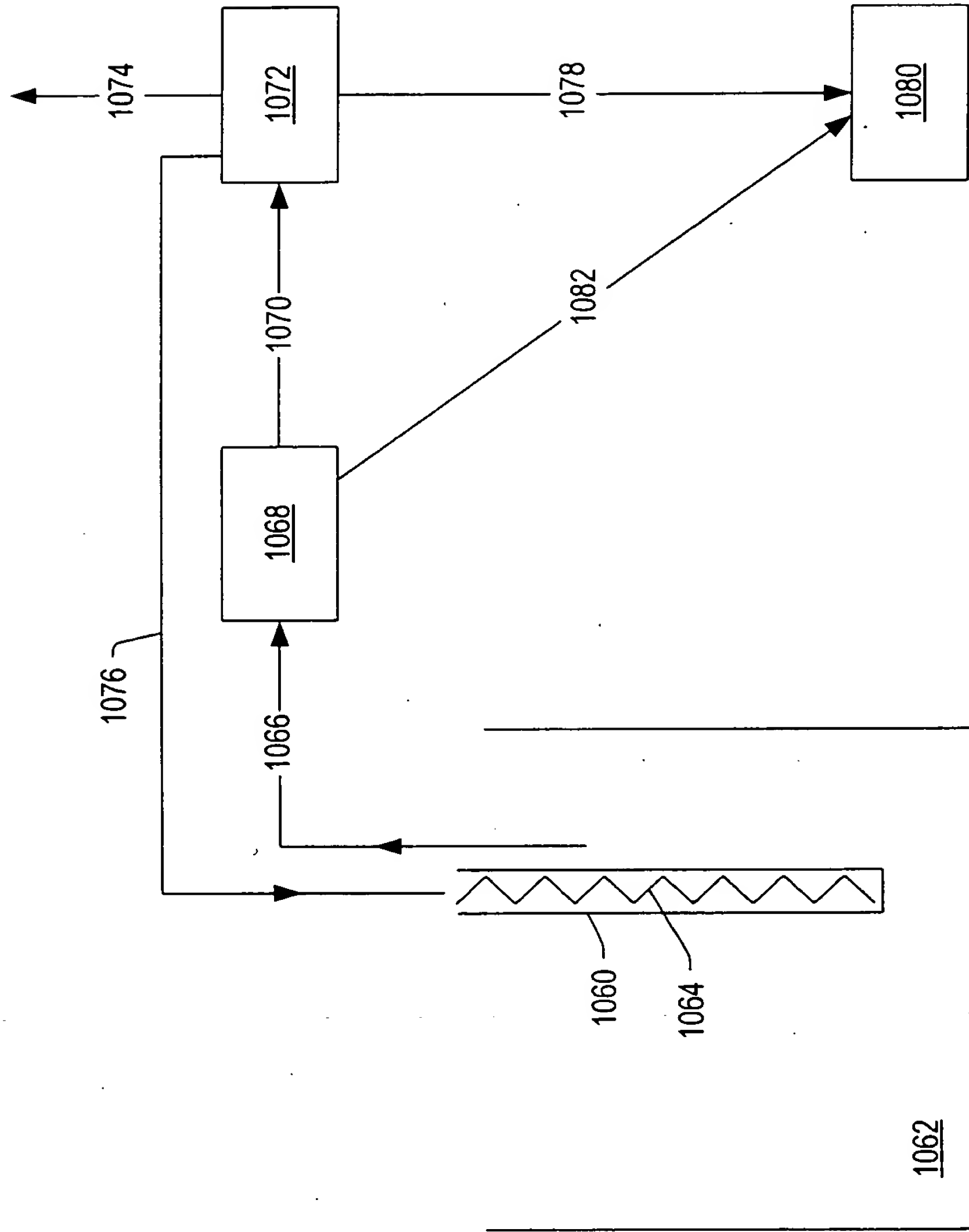


FIG. 37



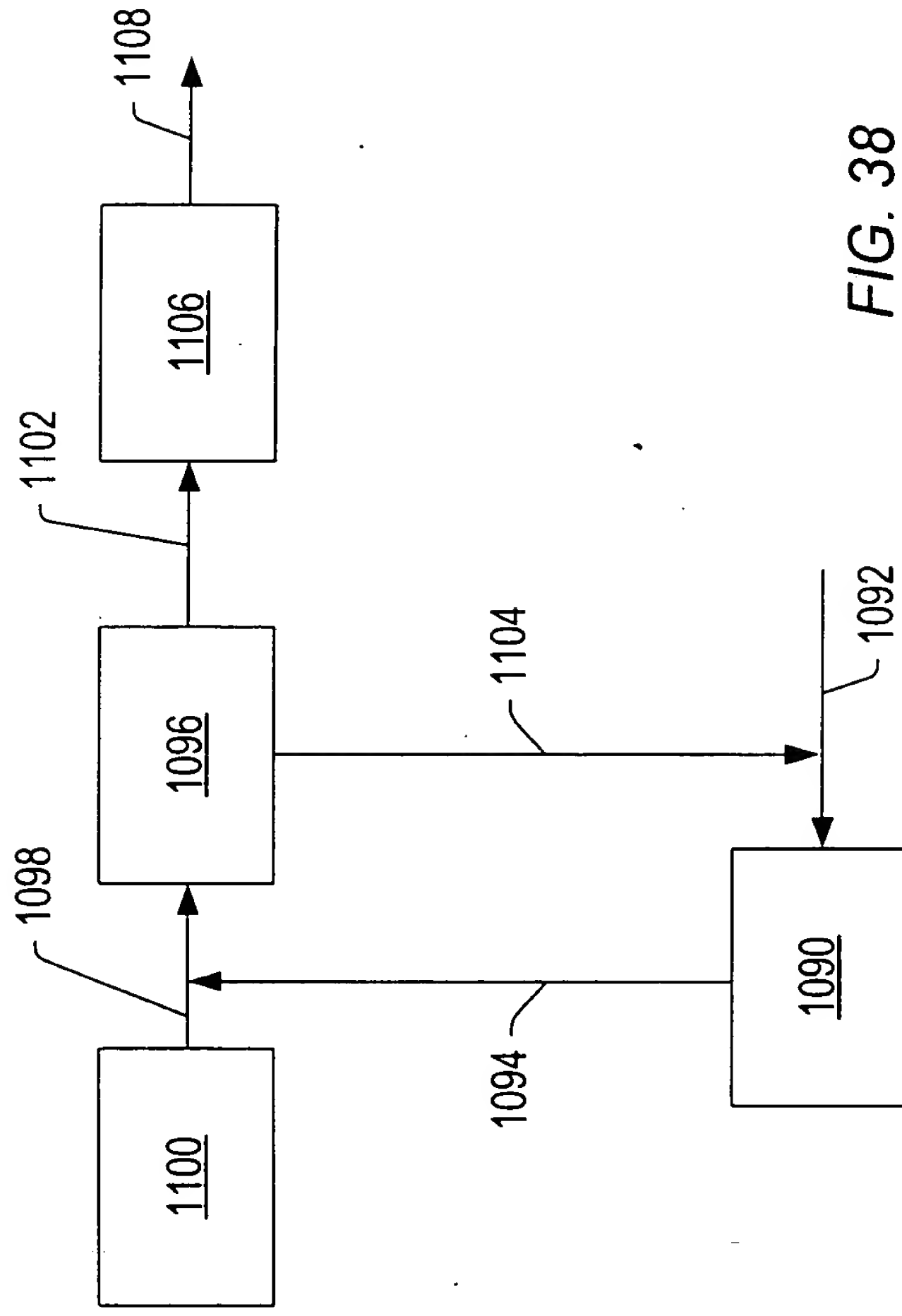


FIG. 38



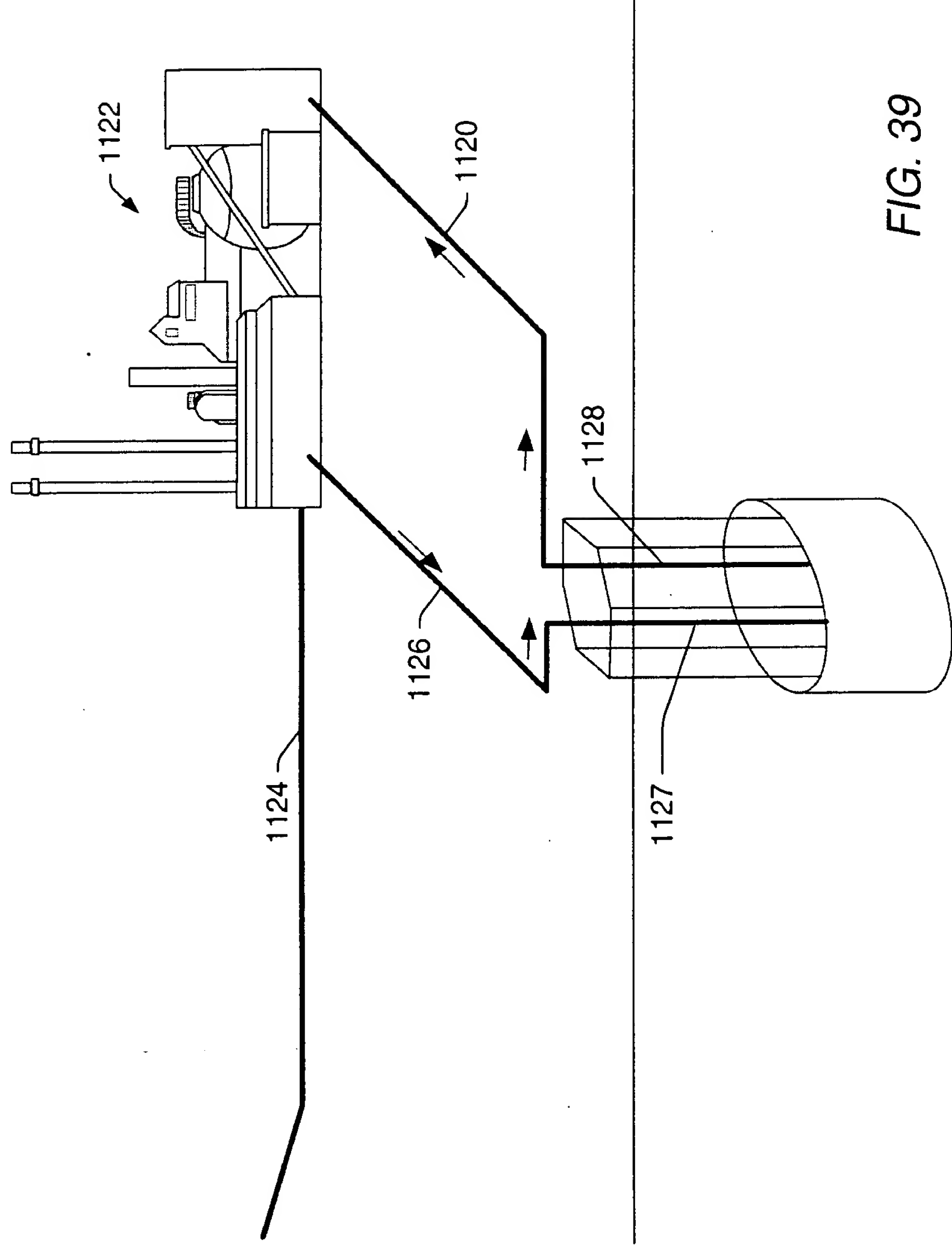


FIG. 39



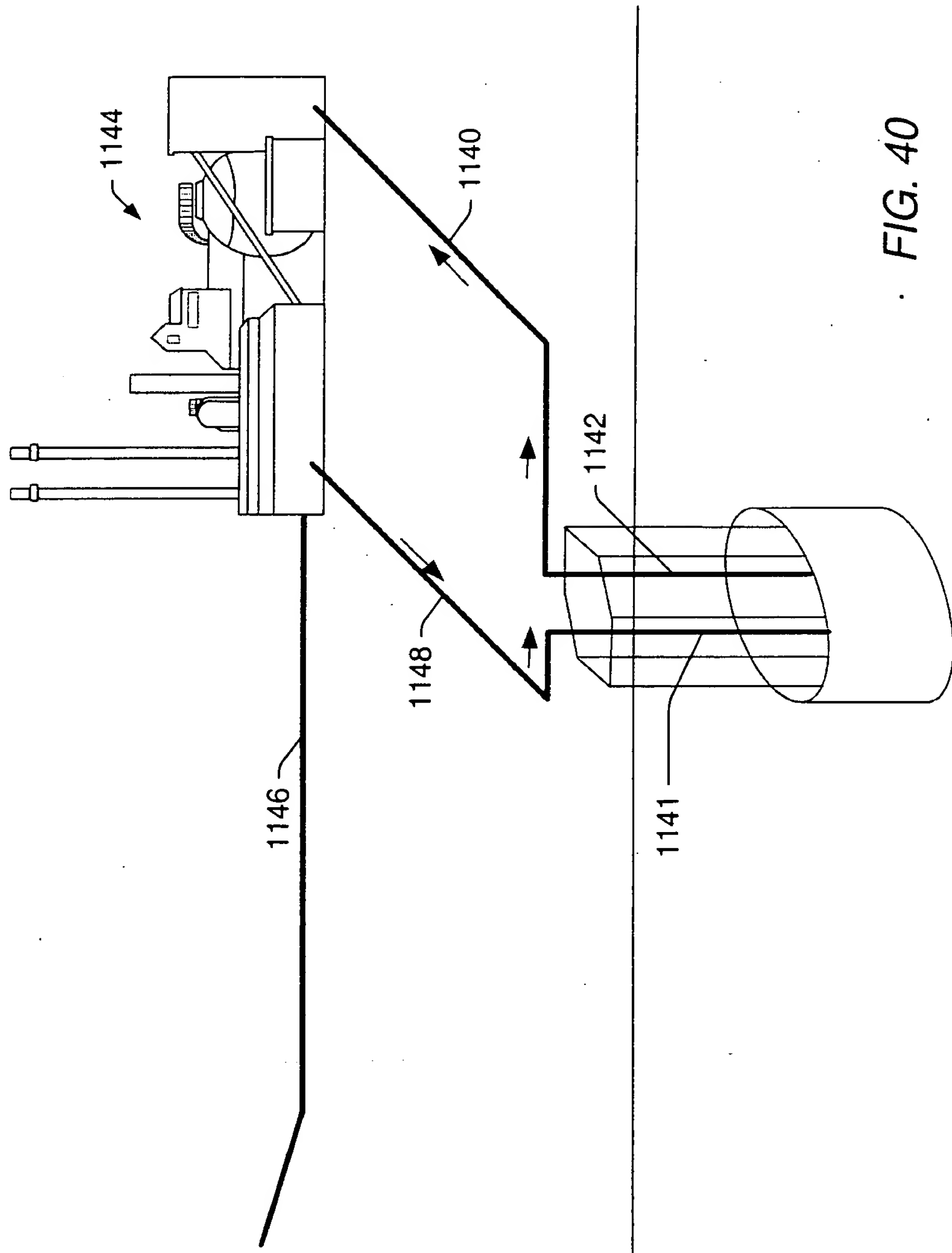








FIG. 42

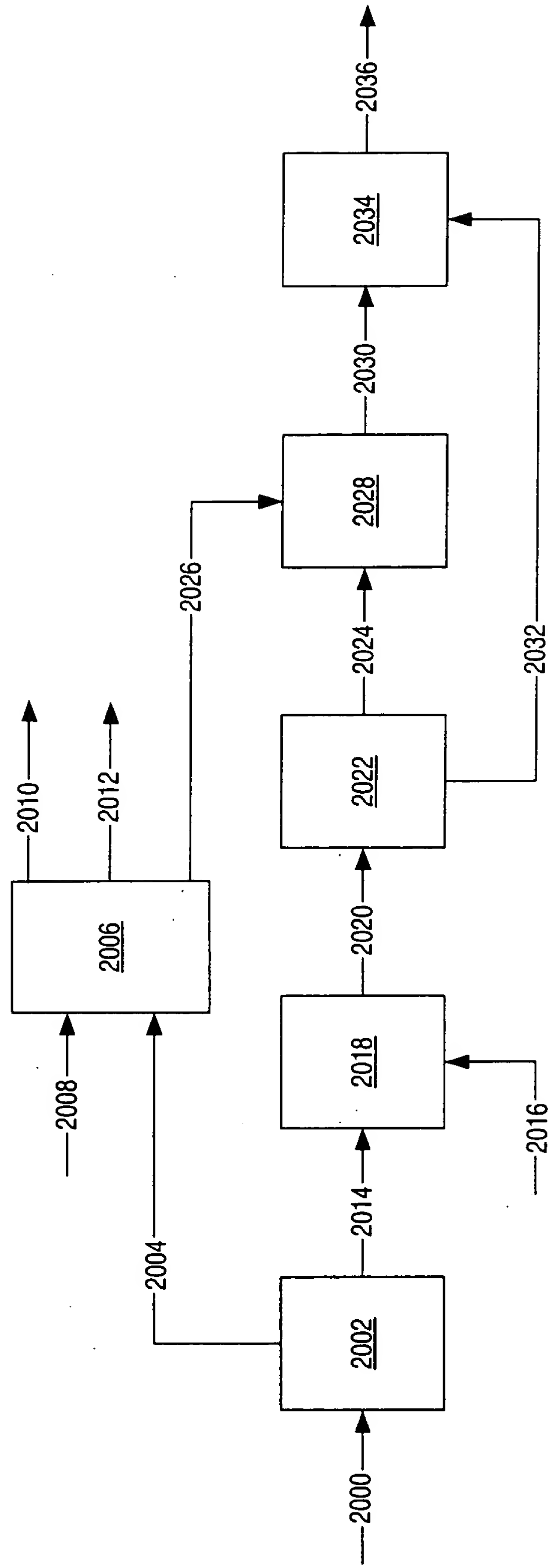


FIG. 42



FIG. 43 is a block diagram of a system 2060. The system 2060 includes a first processing unit 2062, a second processing unit 2066, and a third processing unit 2070. The first processing unit 2062 is connected to the second processing unit 2066, which is connected to the third processing unit 2070. The third processing unit 2070 is connected to an output 2074. The system 2060 also includes a control unit 2064 and a data unit 2068. The control unit 2064 is connected to the first processing unit 2062, and the data unit 2068 is connected to the second processing unit 2066. The system 2060 is configured to process data received from an input 2060 and output the processed data to the output 2074.

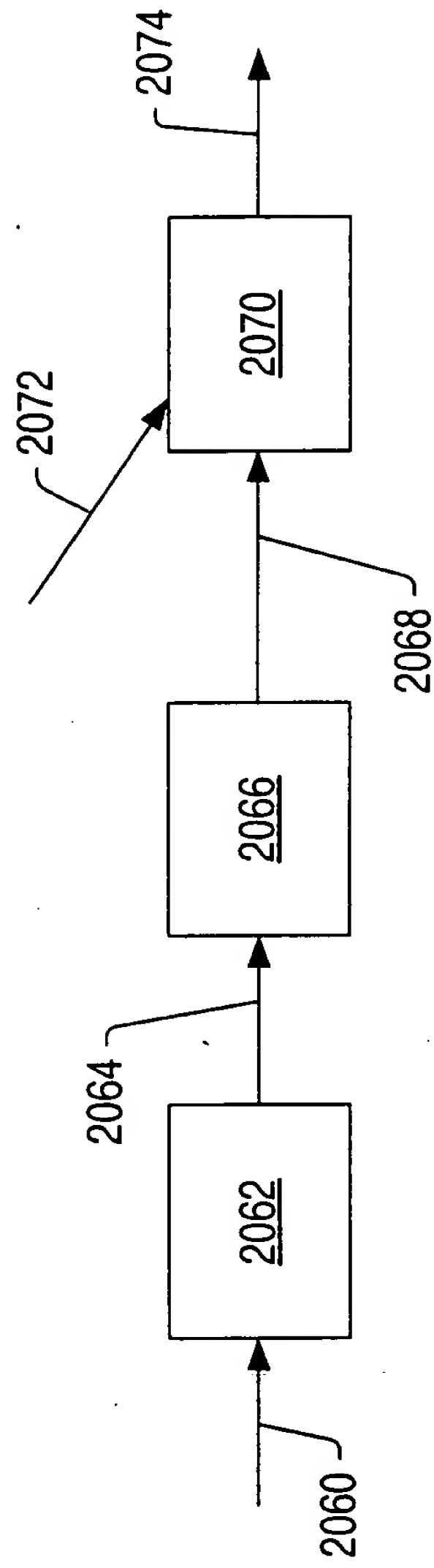


FIG. 43



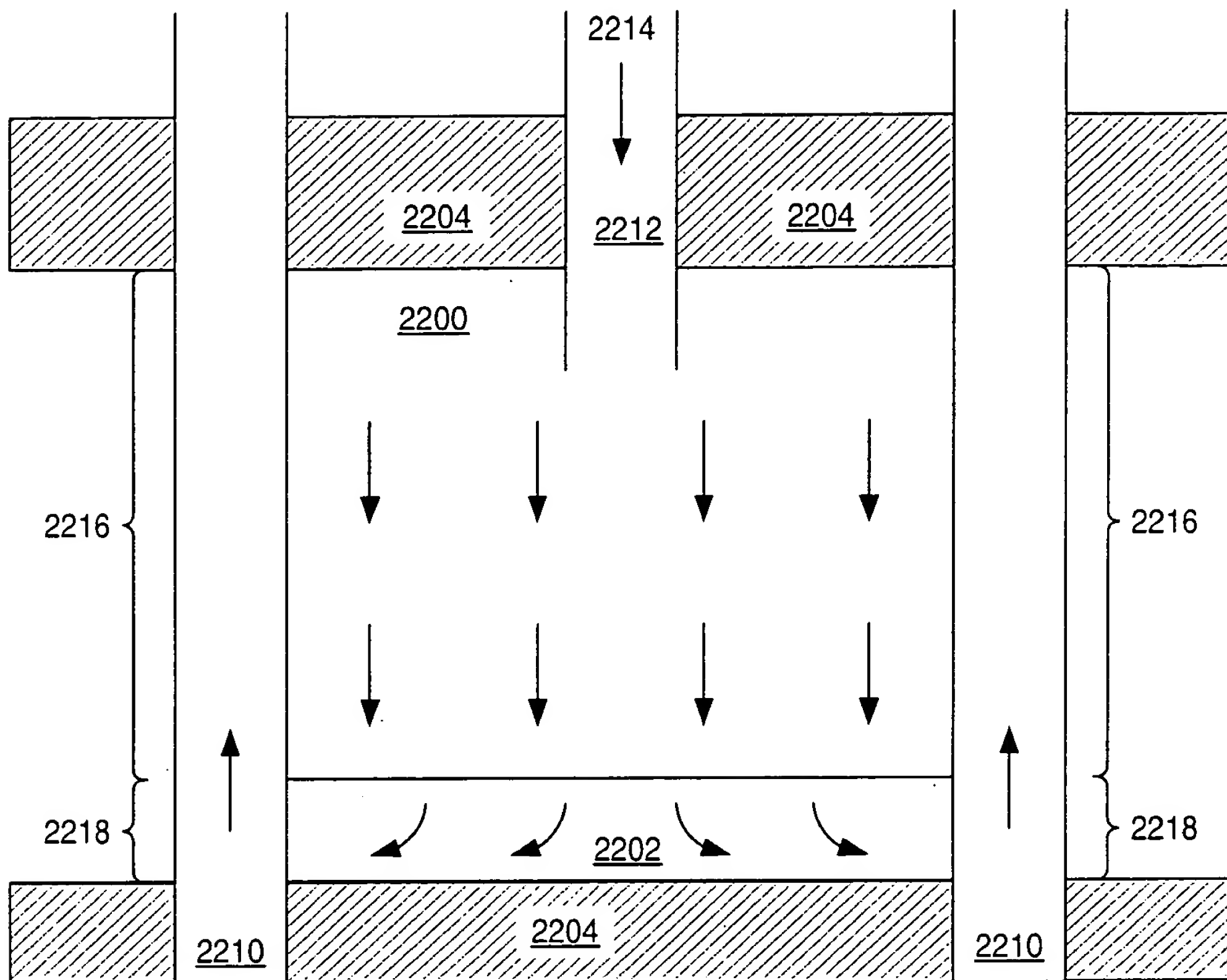


FIG. 44



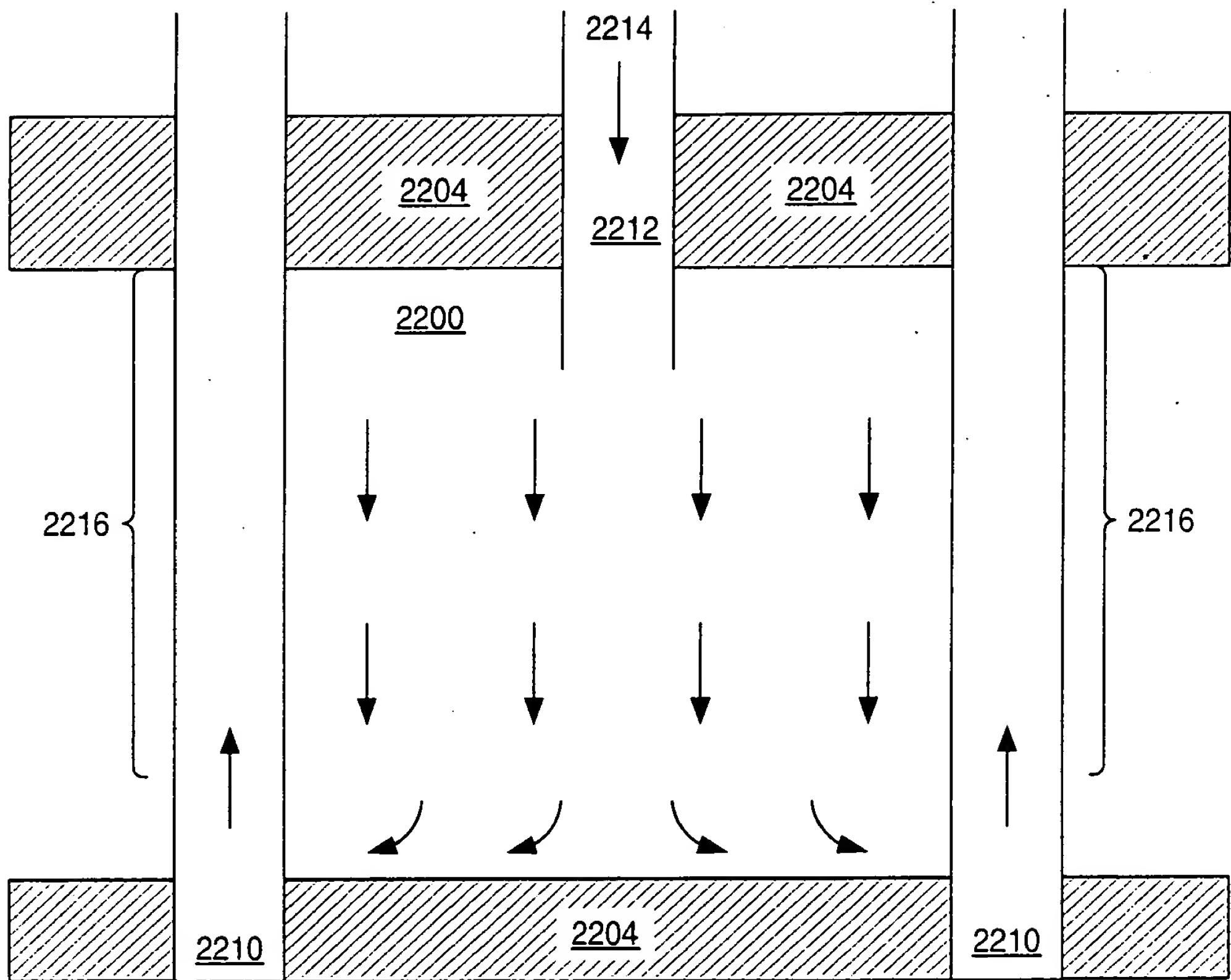


FIG. 45



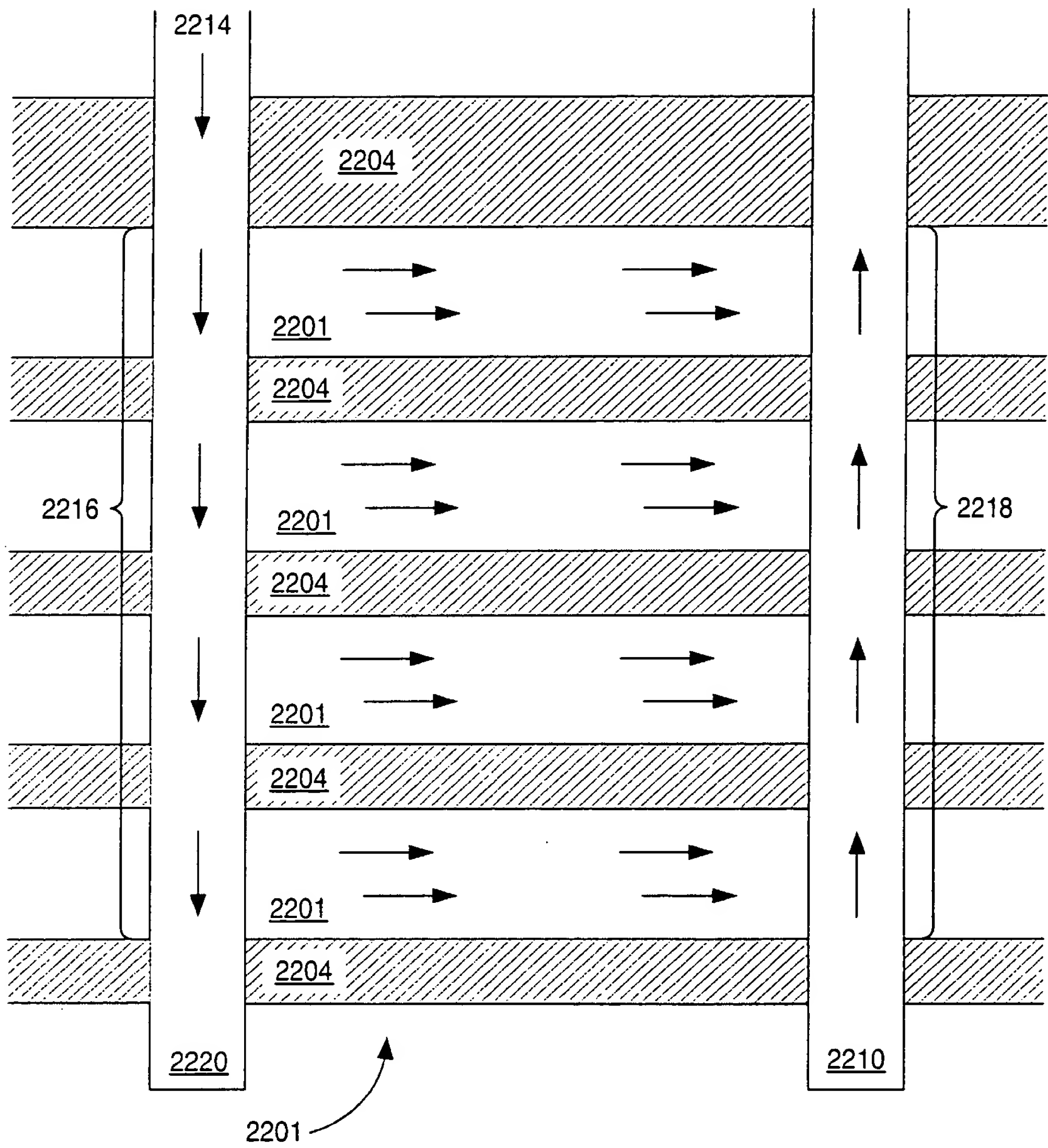


FIG. 46



FIG. 47

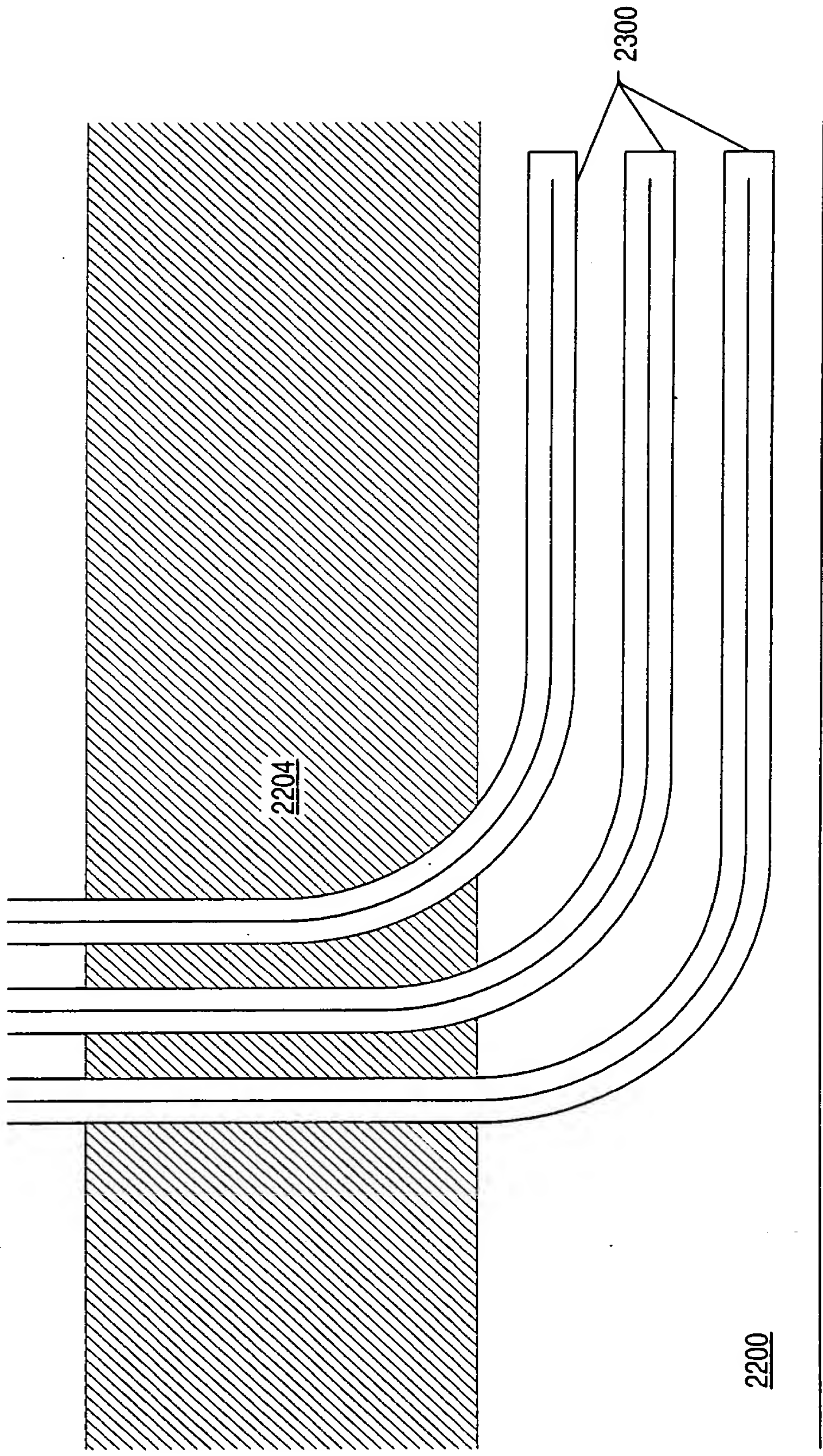


FIG. 47



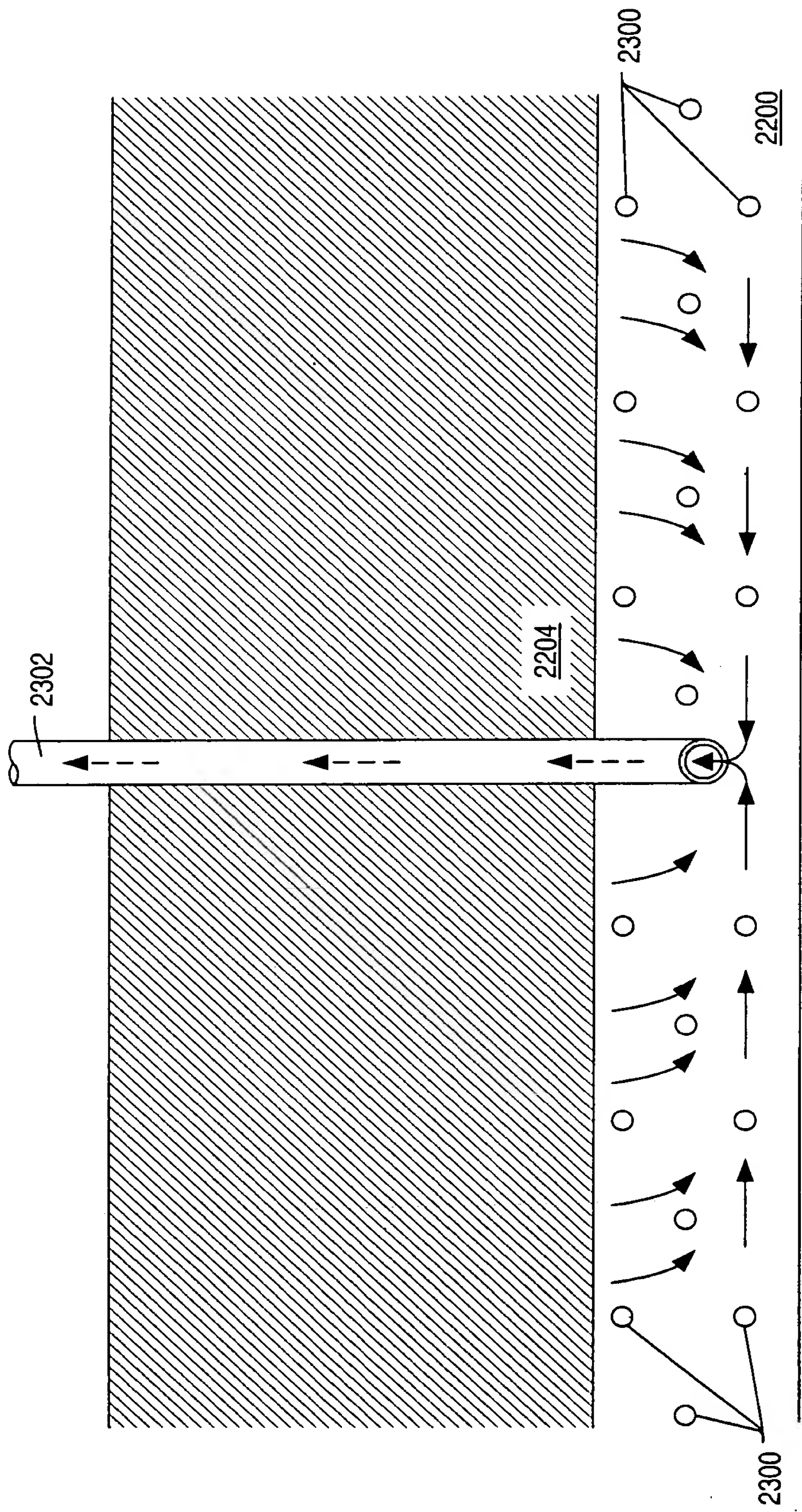


FIG. 48



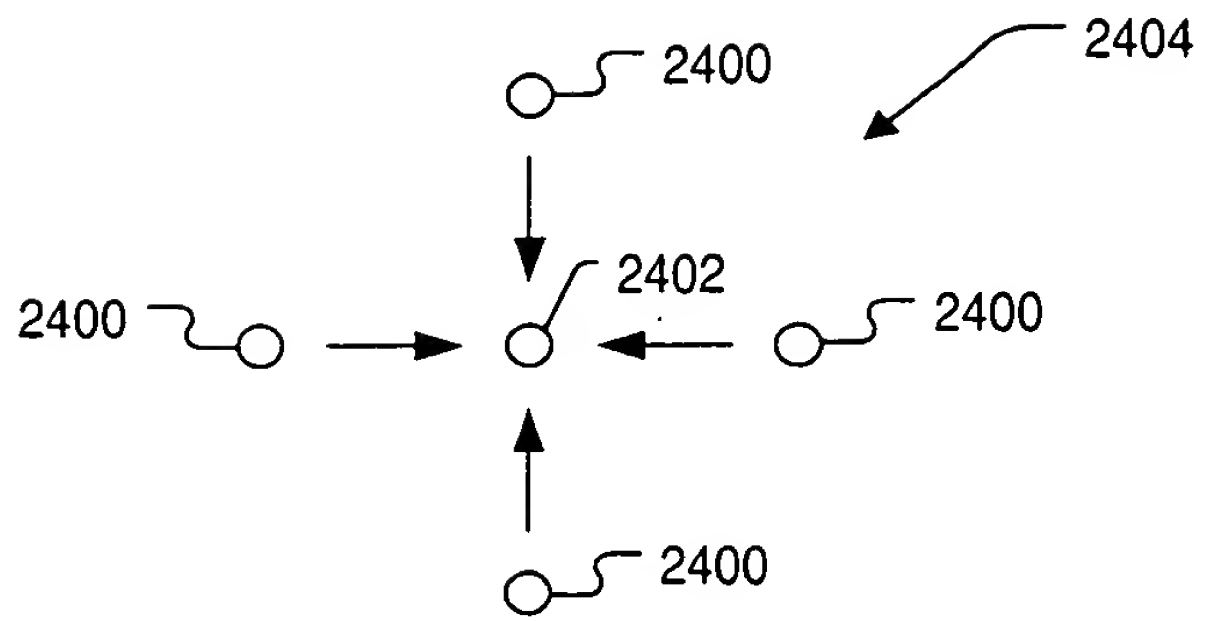


FIG. 49

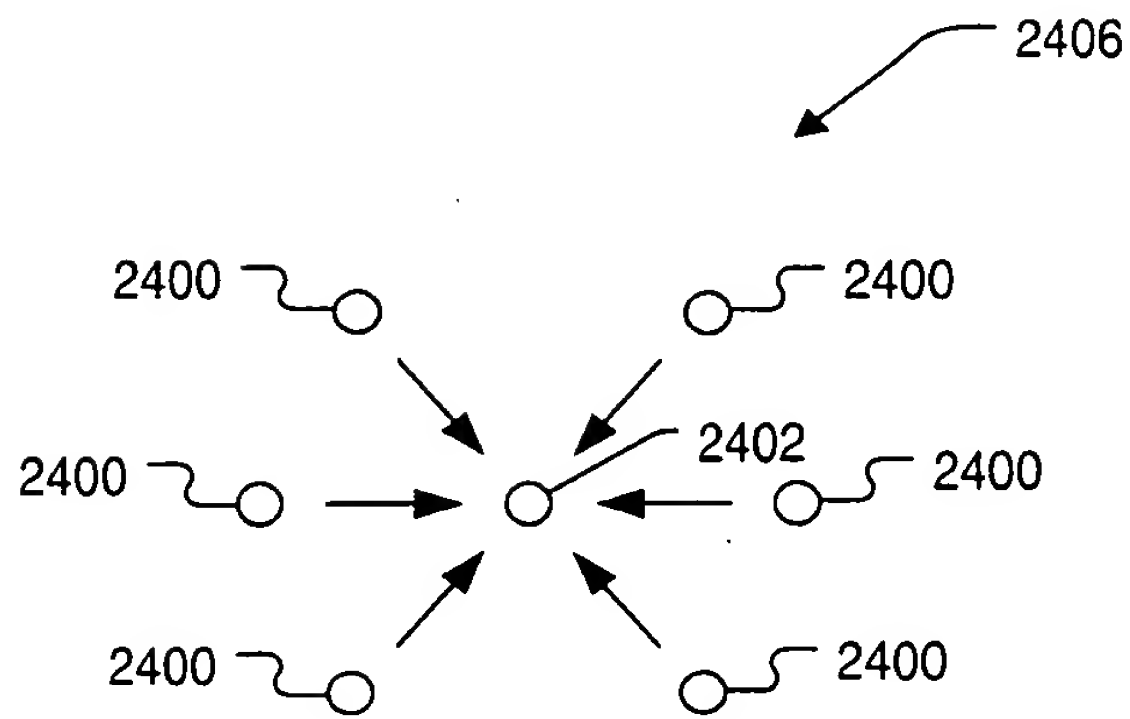


FIG. 50



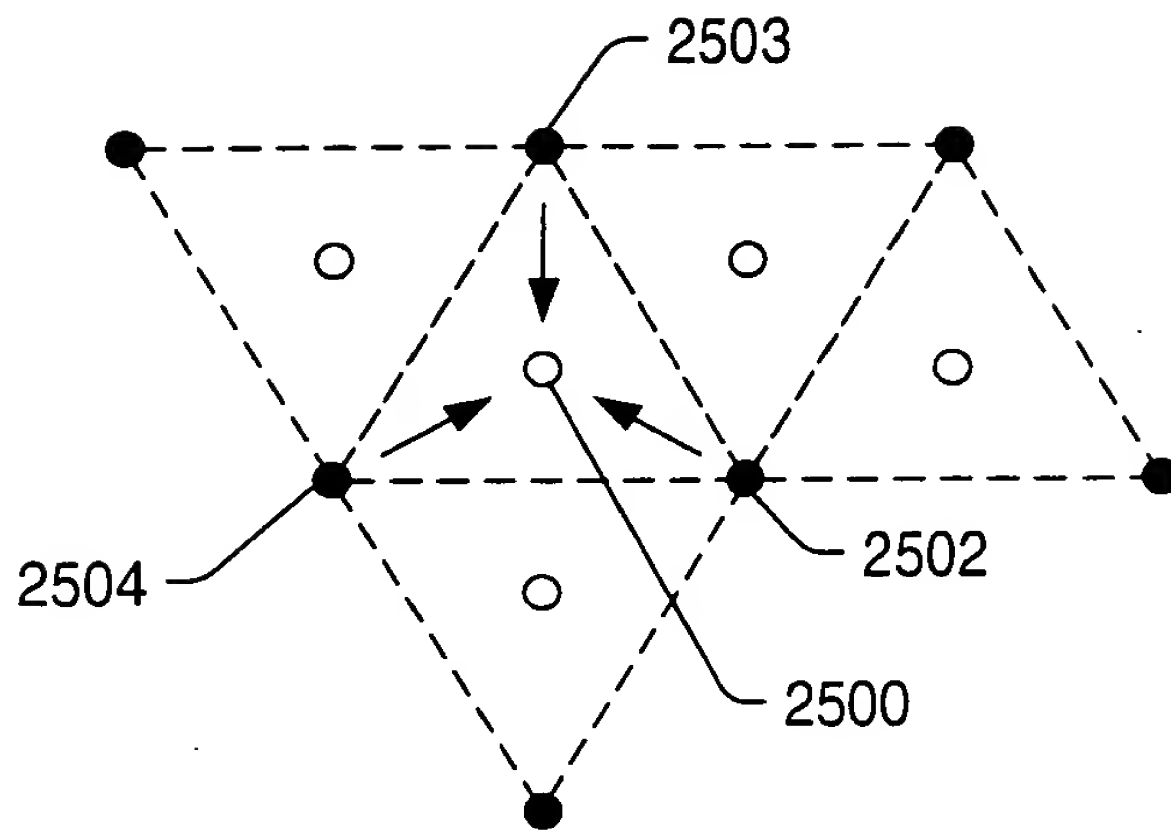


FIG. 51

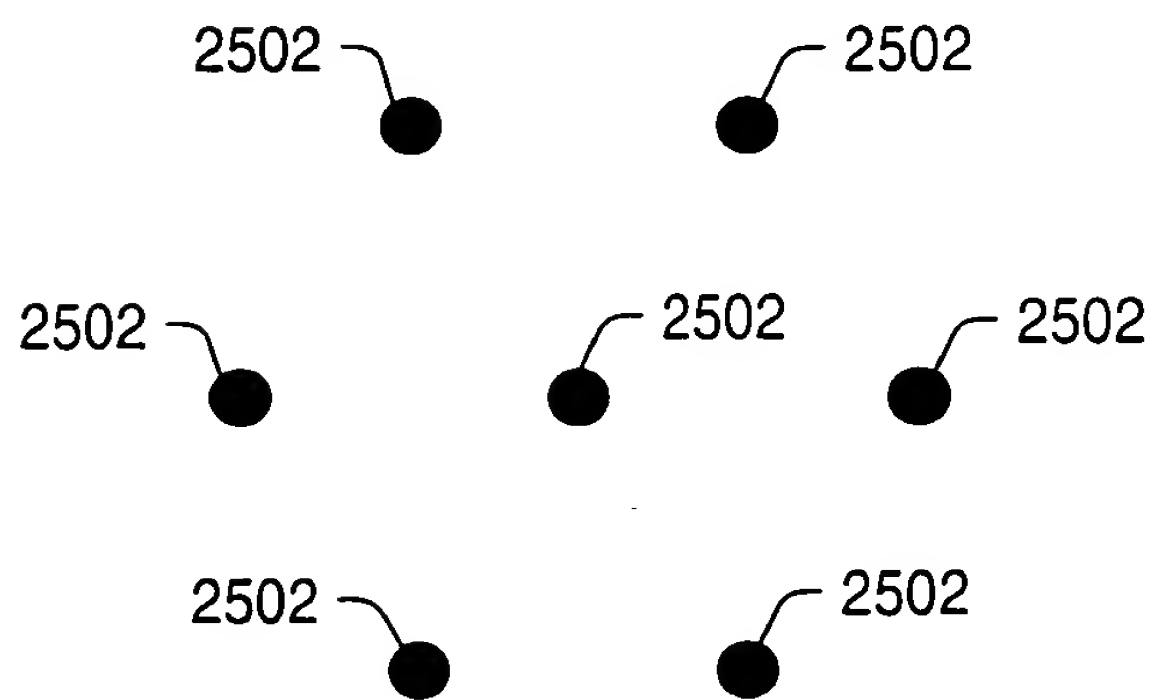


FIG. 52



FIG. 53

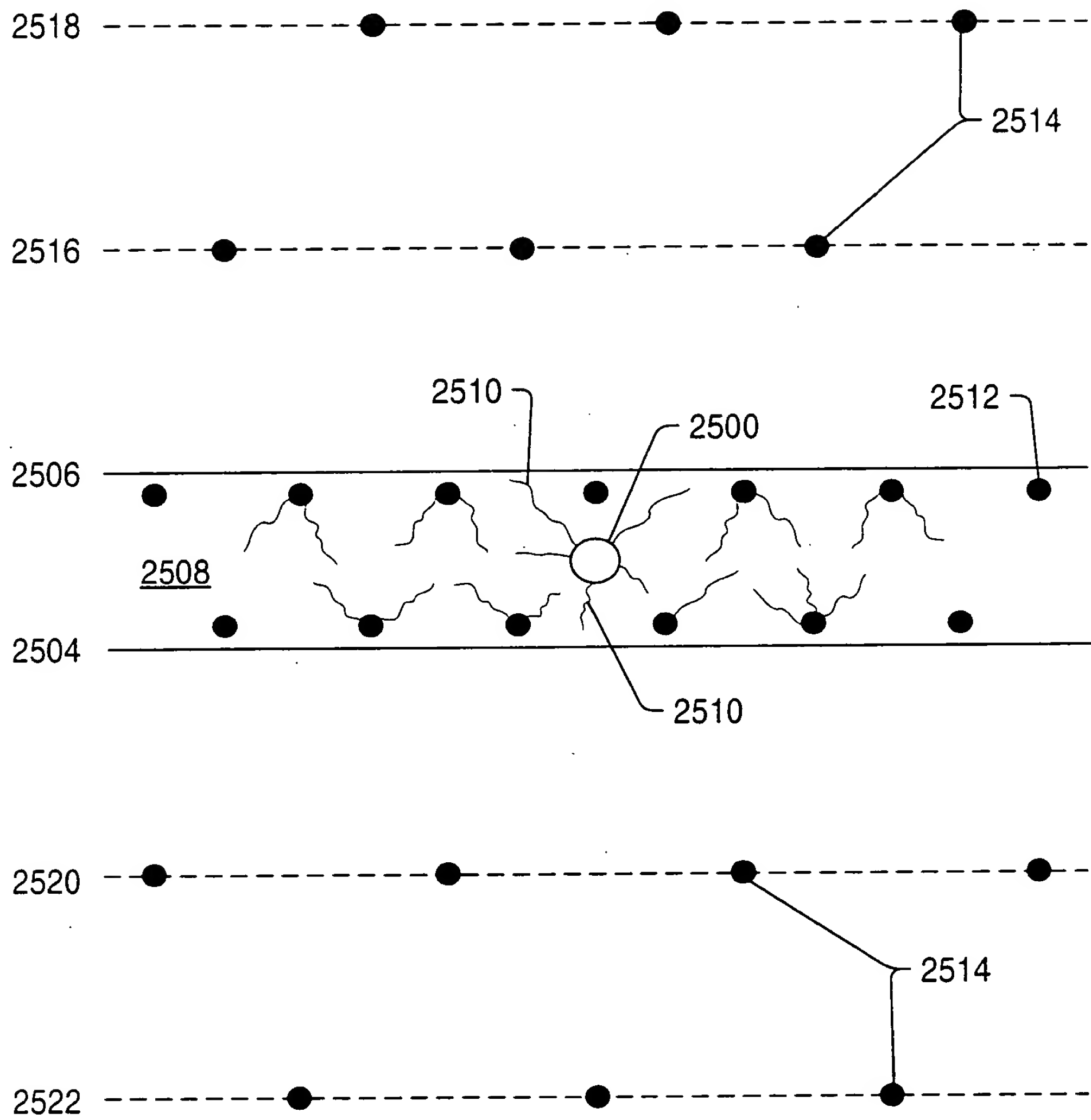


FIG. 53



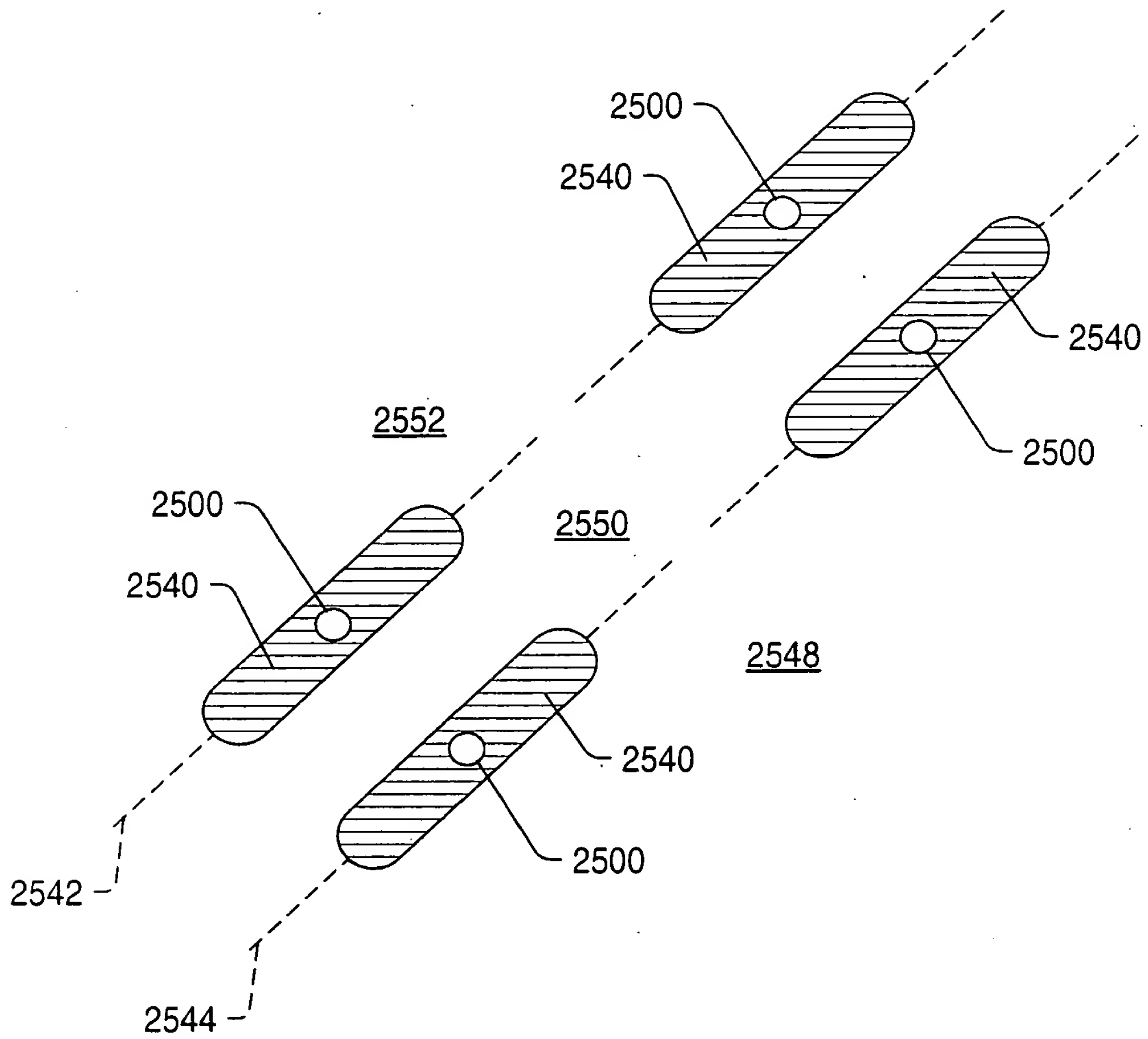


FIG. 54



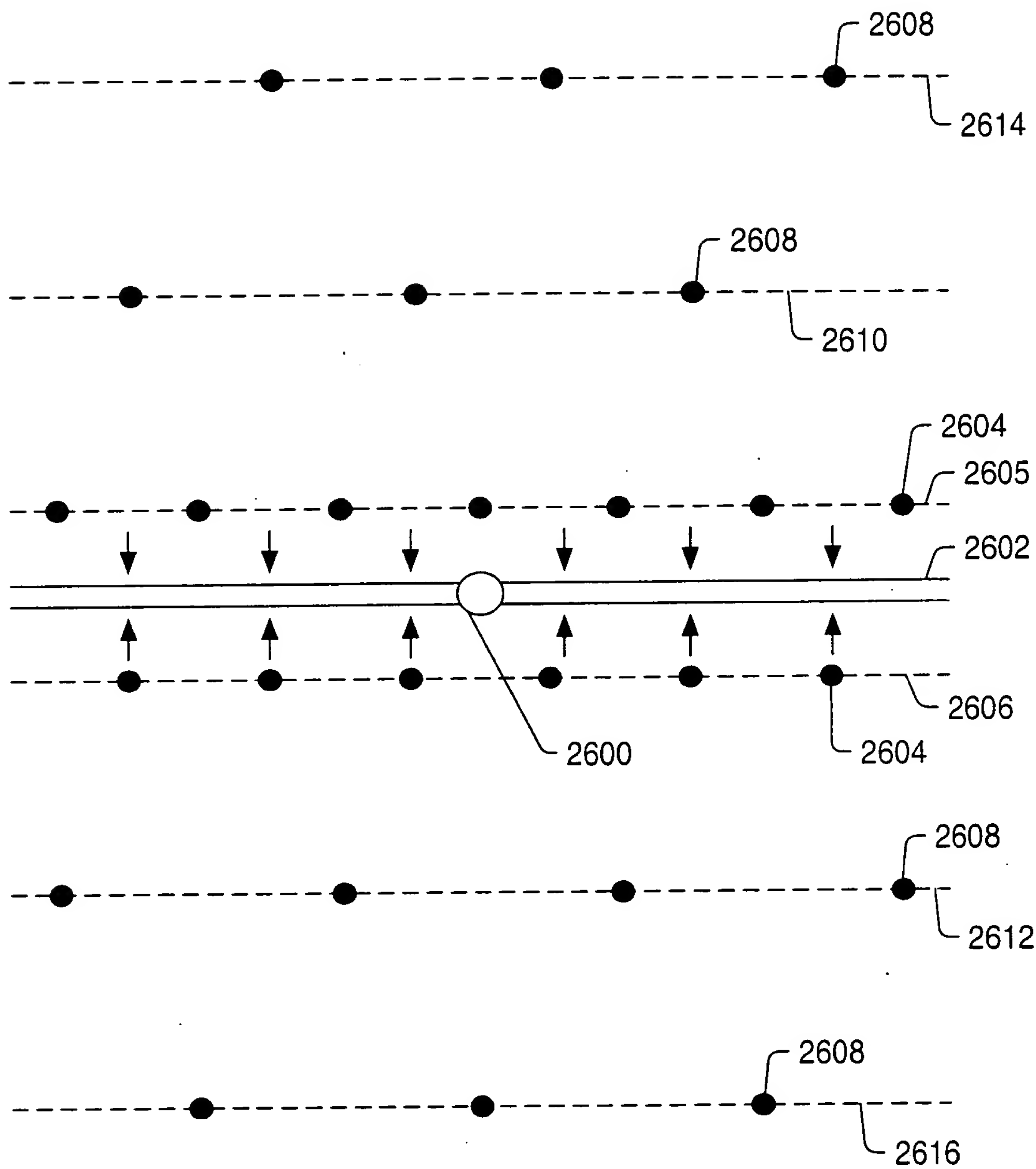


FIG. 55



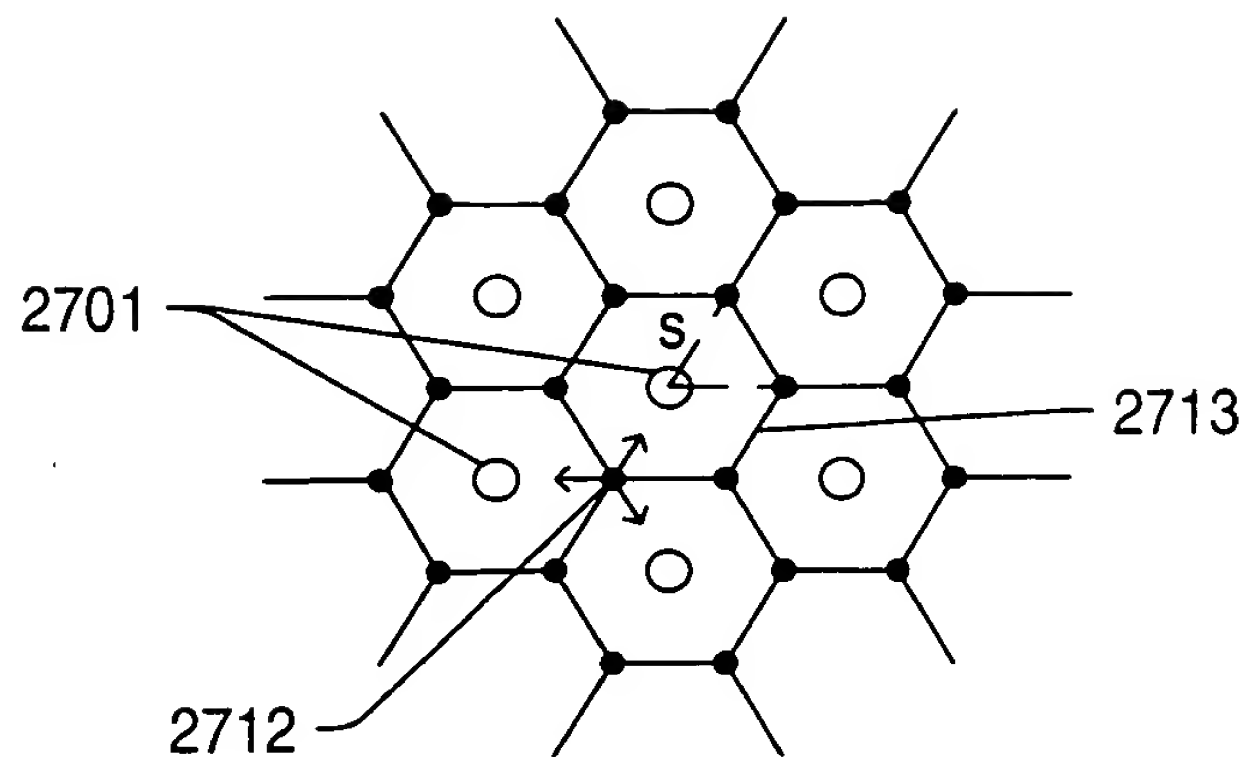


FIG. 58

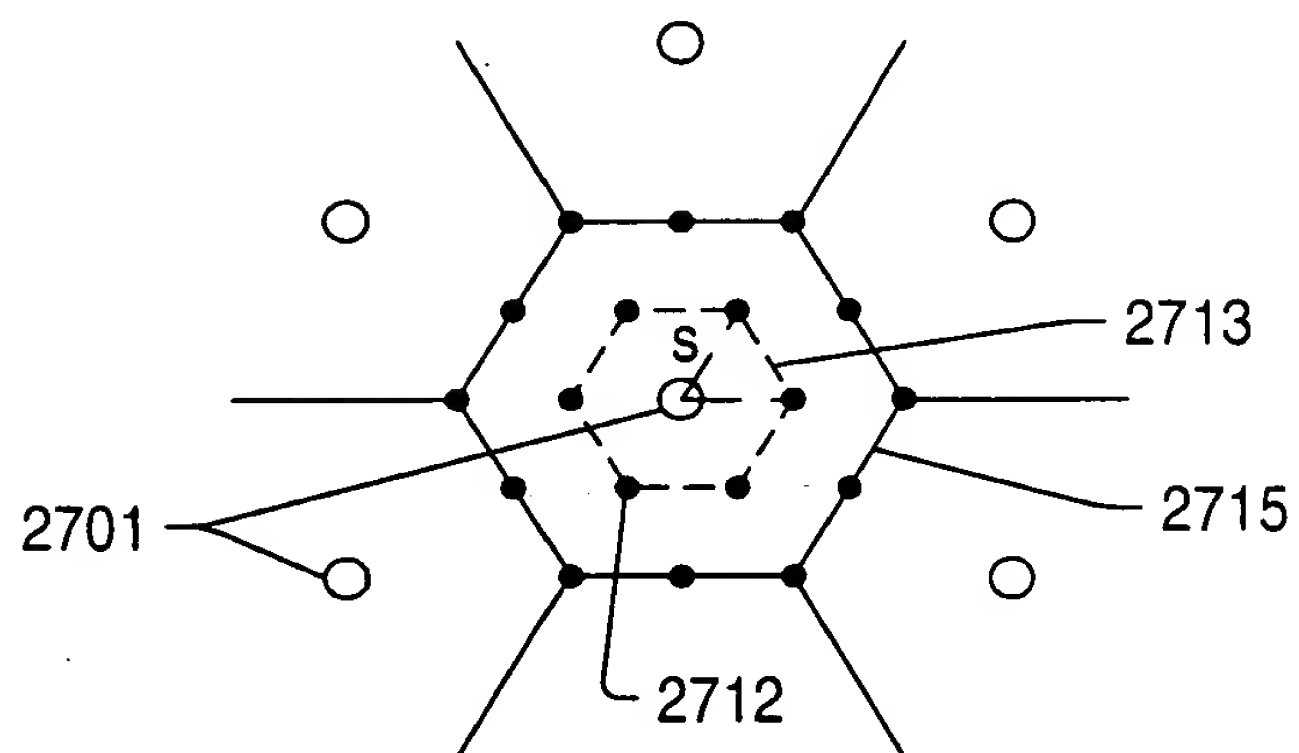


FIG. 59



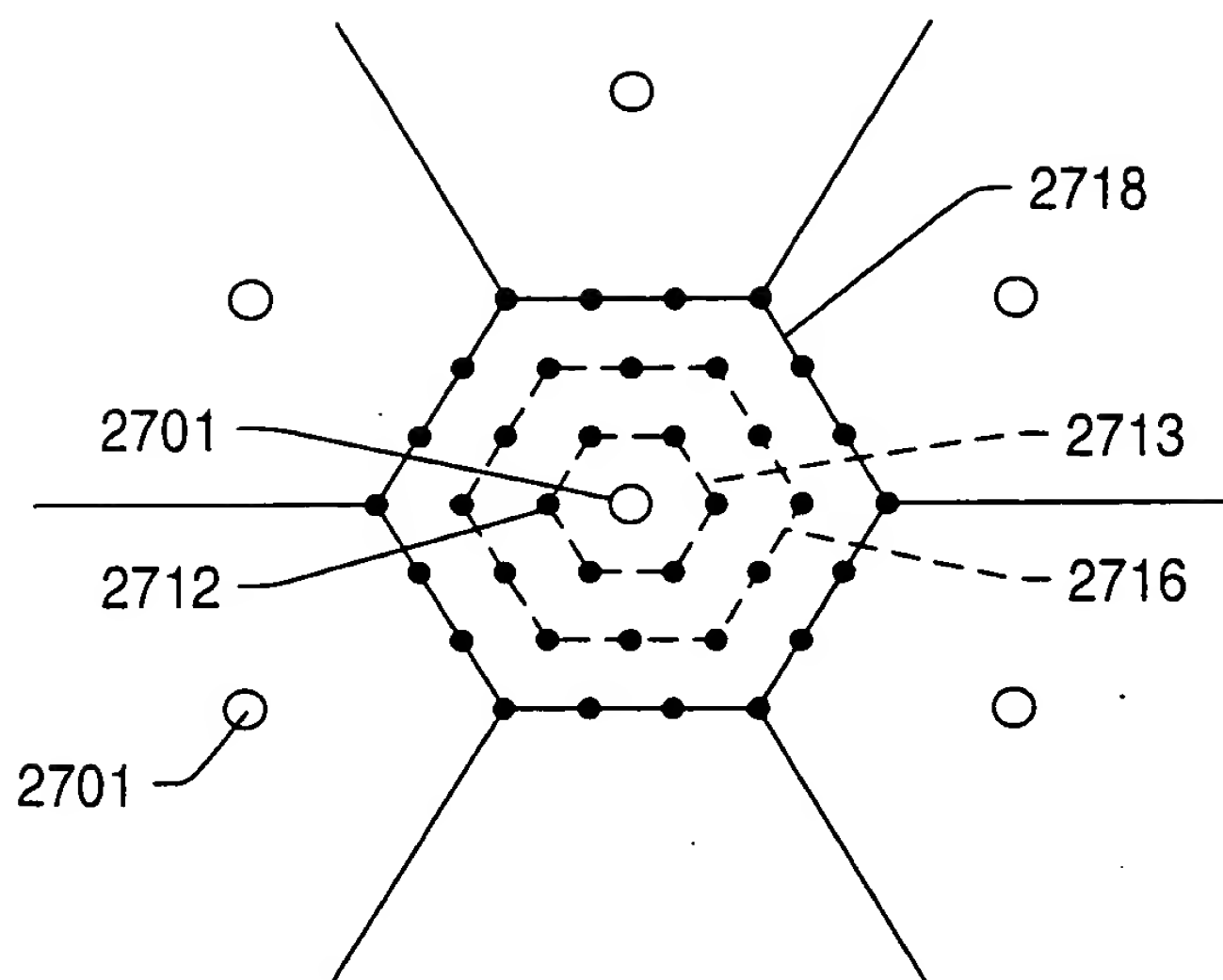


FIG. 60

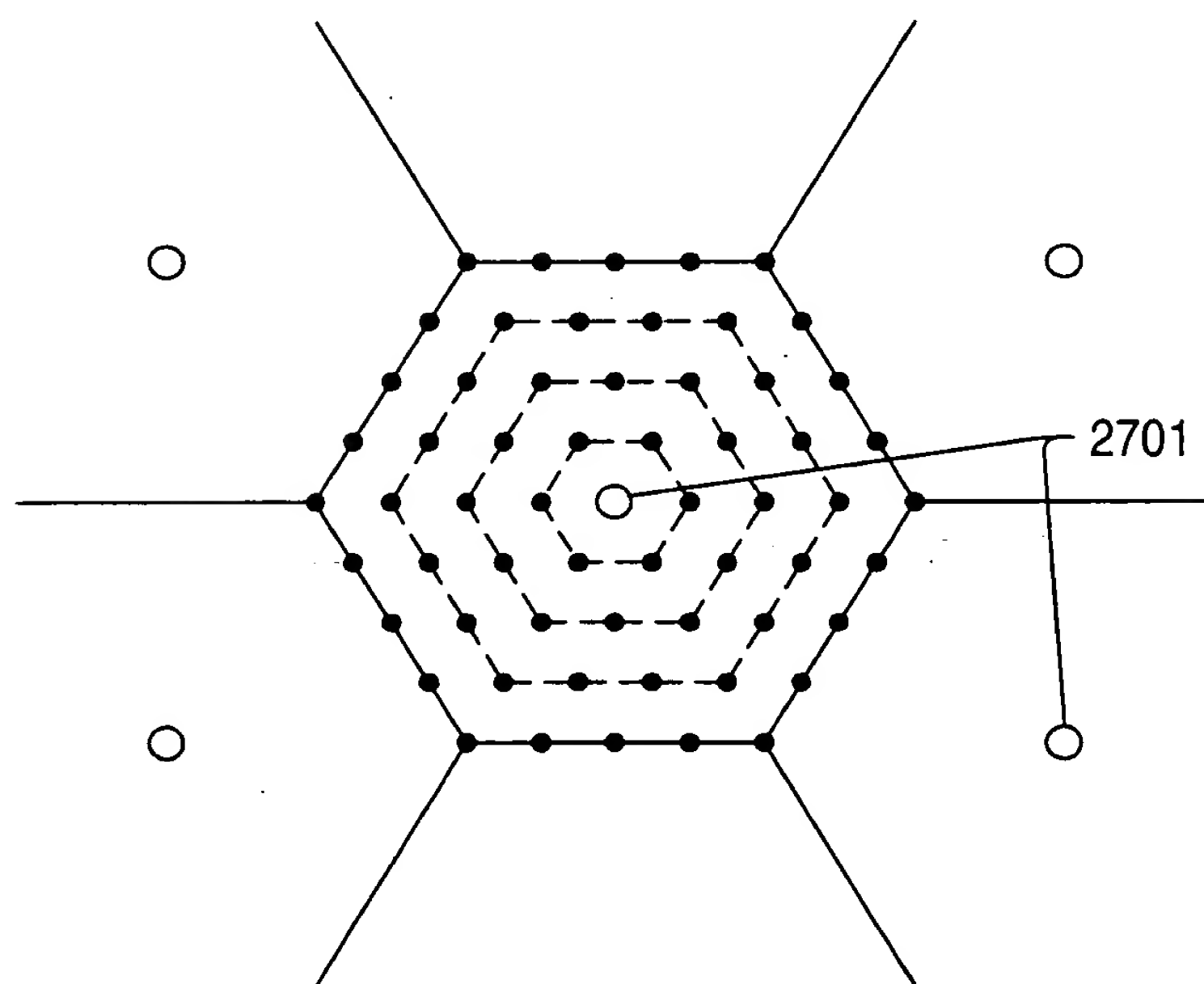


FIG. 61



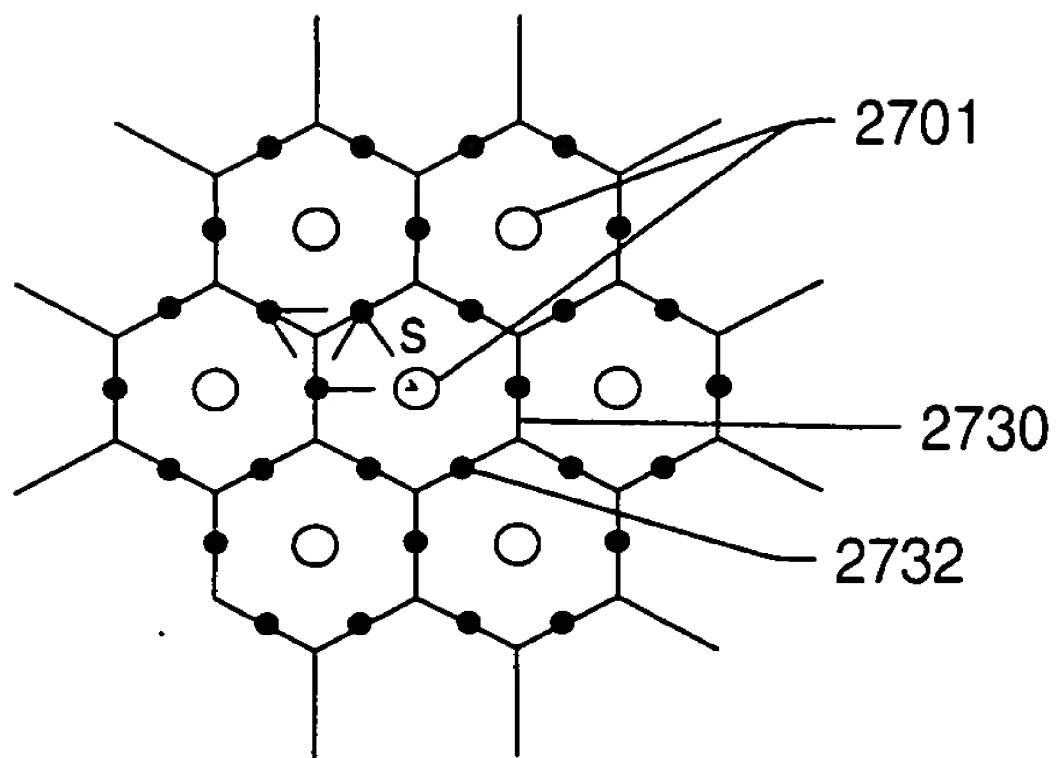


FIG. 62

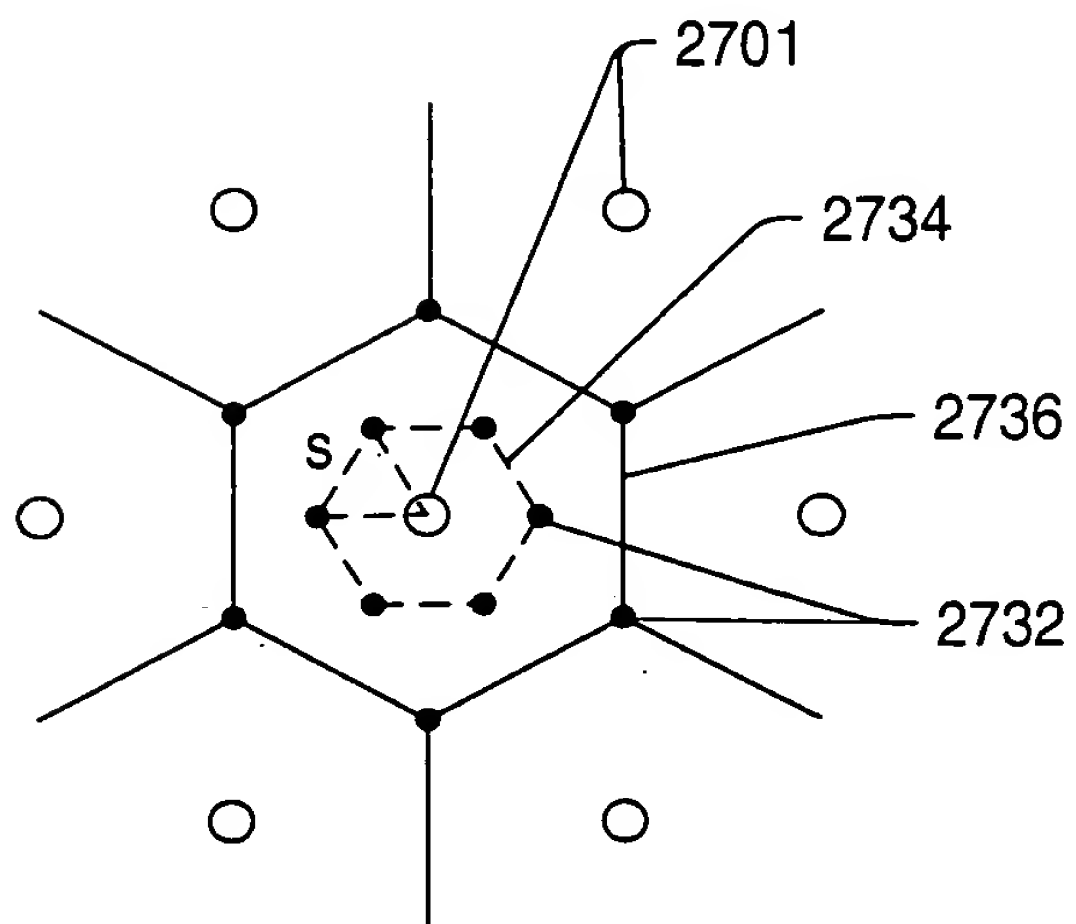


FIG. 63



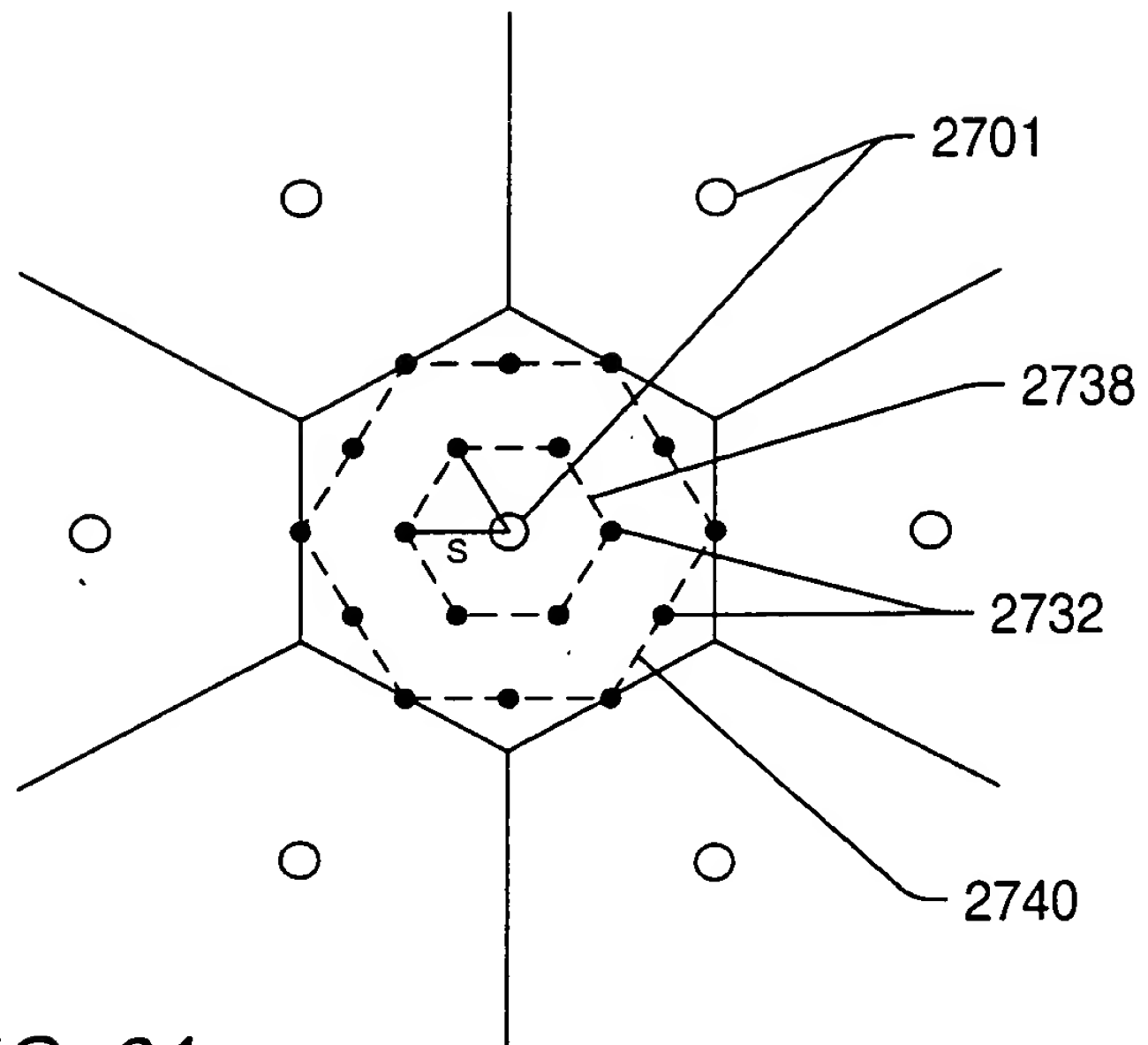


FIG. 64

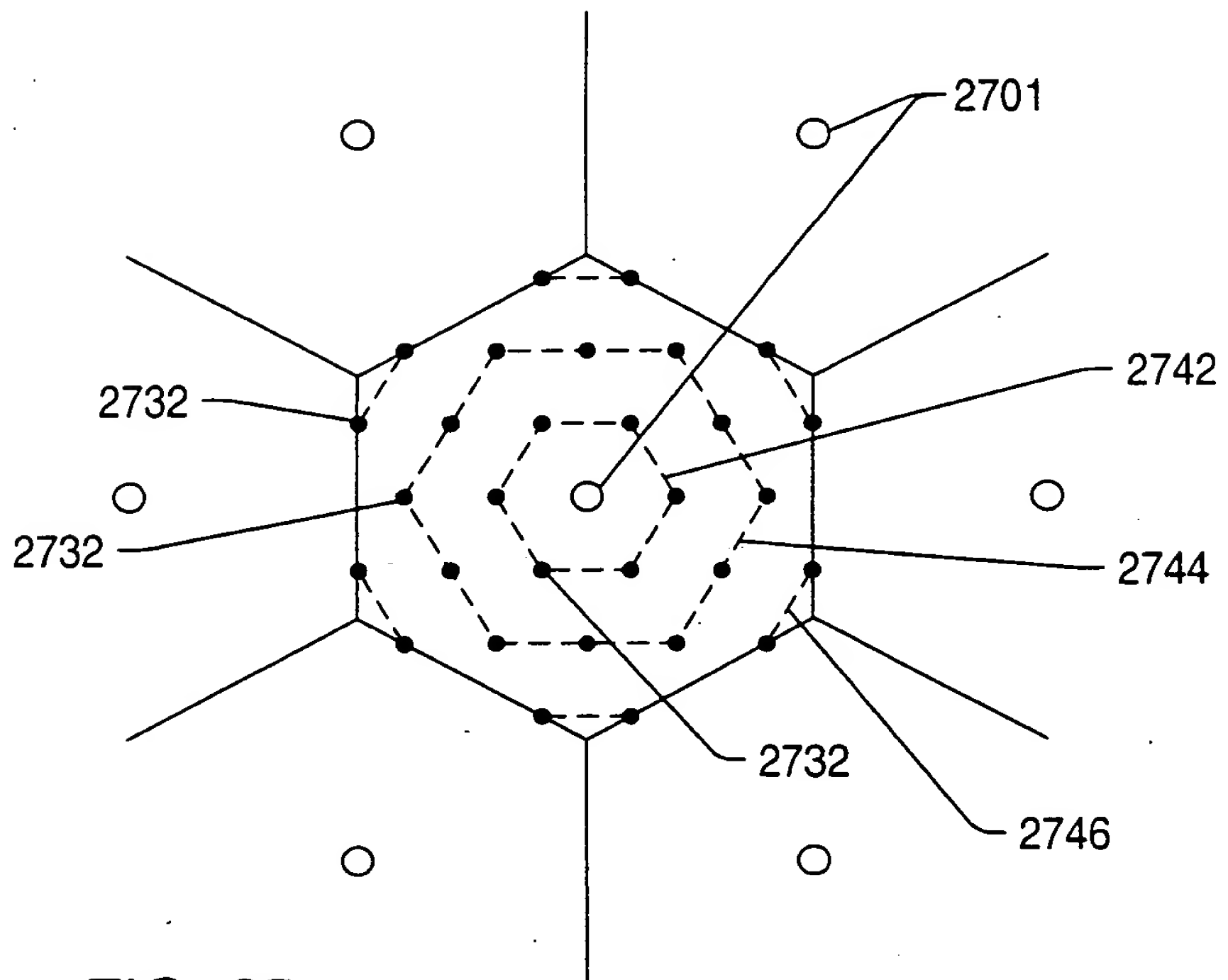


FIG. 65



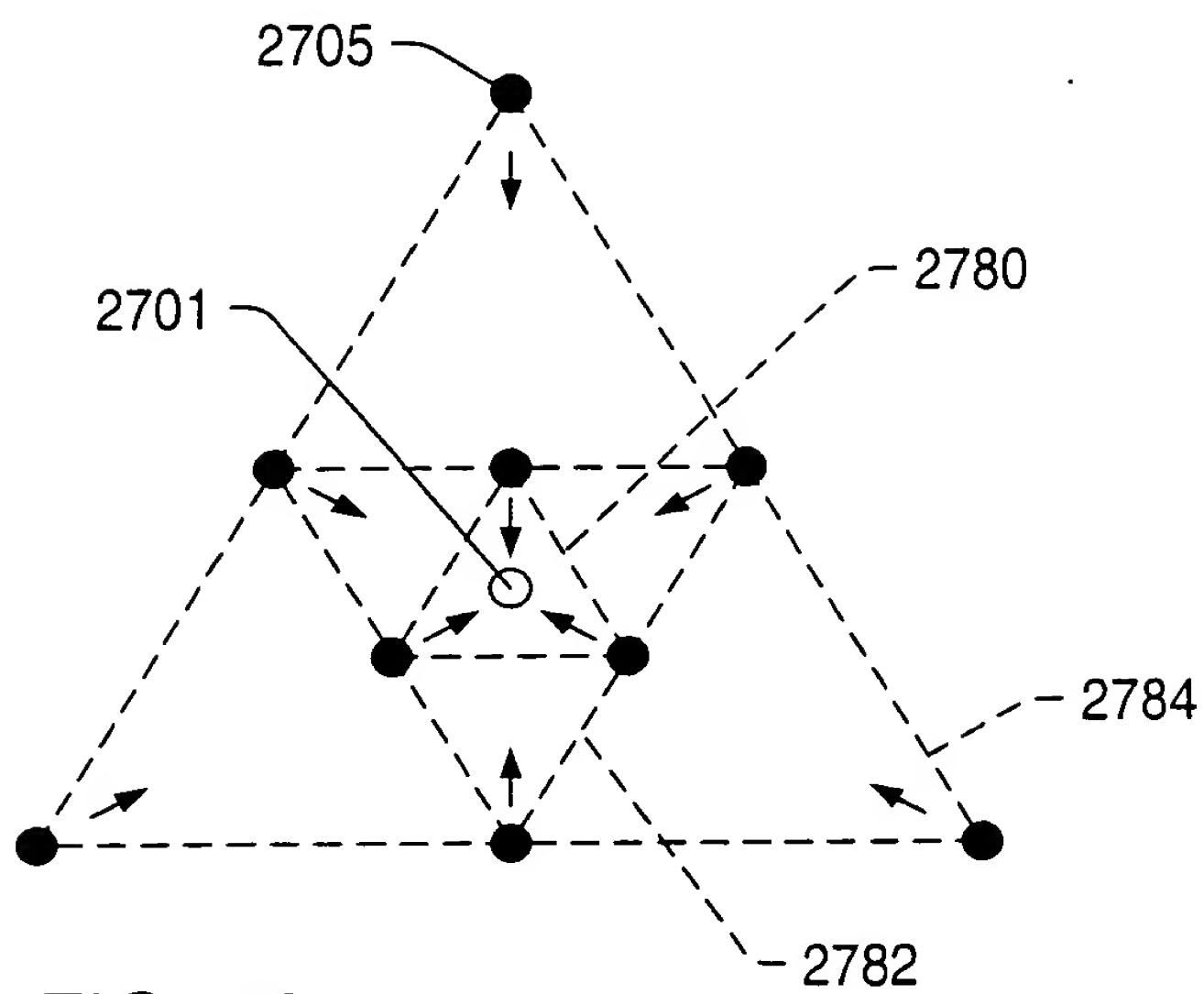


FIG. 70



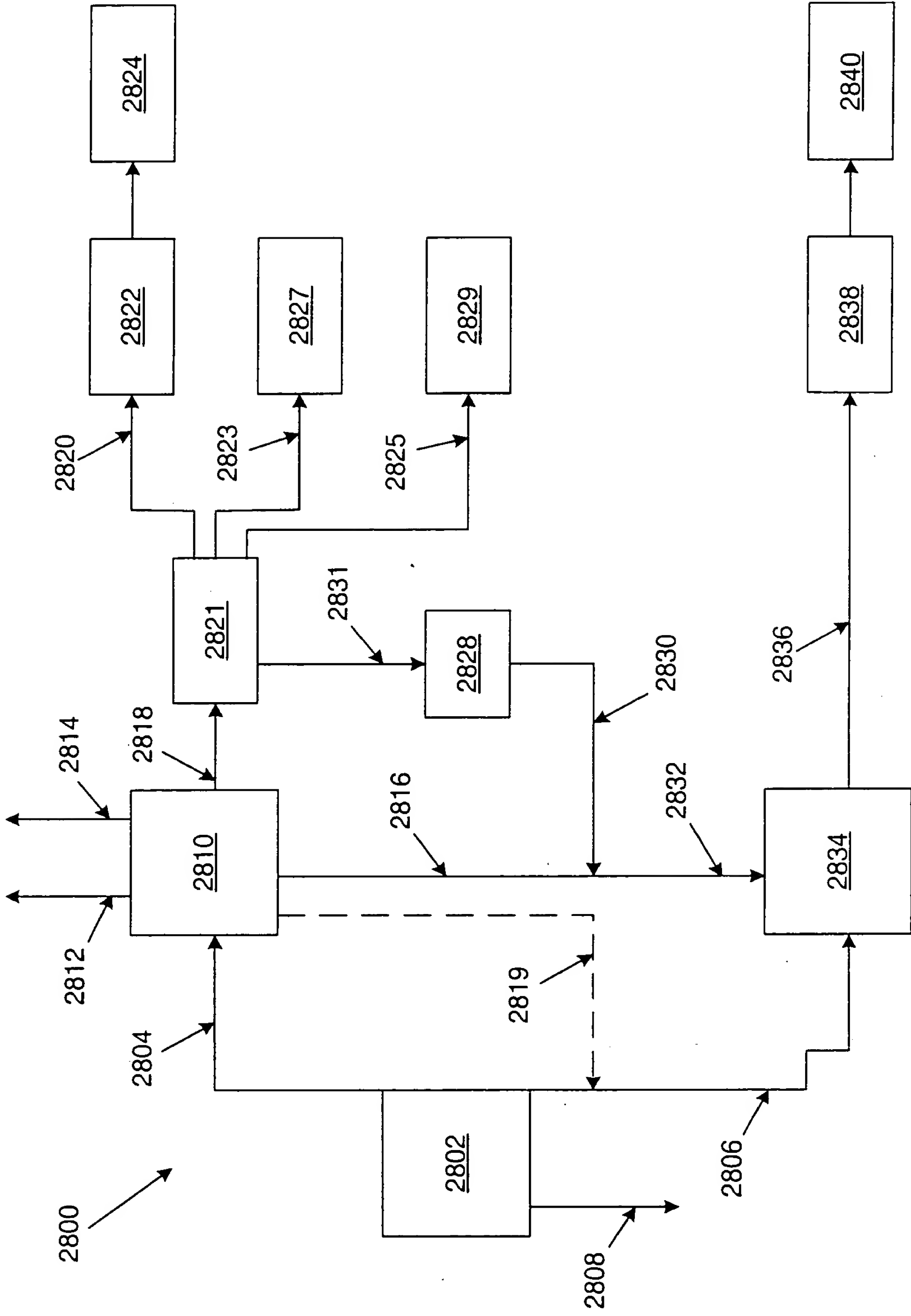


Fig. 71



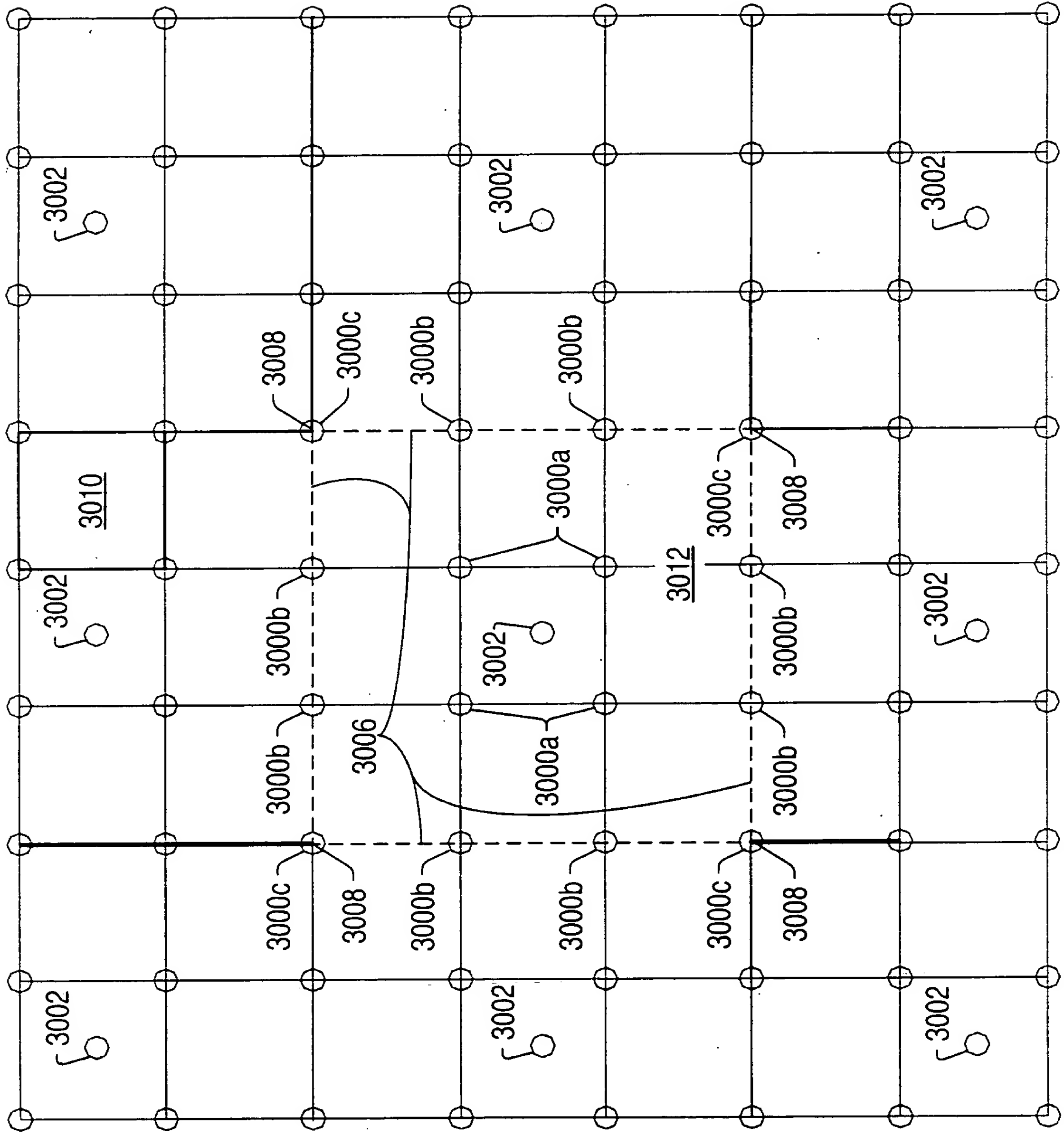


FIG. 74



FIG. 75 is a schematic diagram of a hexagonal lattice structure. The lattice is composed of hexagonal cells. A central hexagonal cell is labeled 3000. It is surrounded by six other hexagonal cells, each labeled 3002. These six cells are further surrounded by a ring of twelve hexagonal cells, each labeled 3006. The outermost ring consists of twelve hexagonal cells, each labeled 3008. The diagram illustrates the connectivity and arrangement of these cells in a hexagonal lattice.

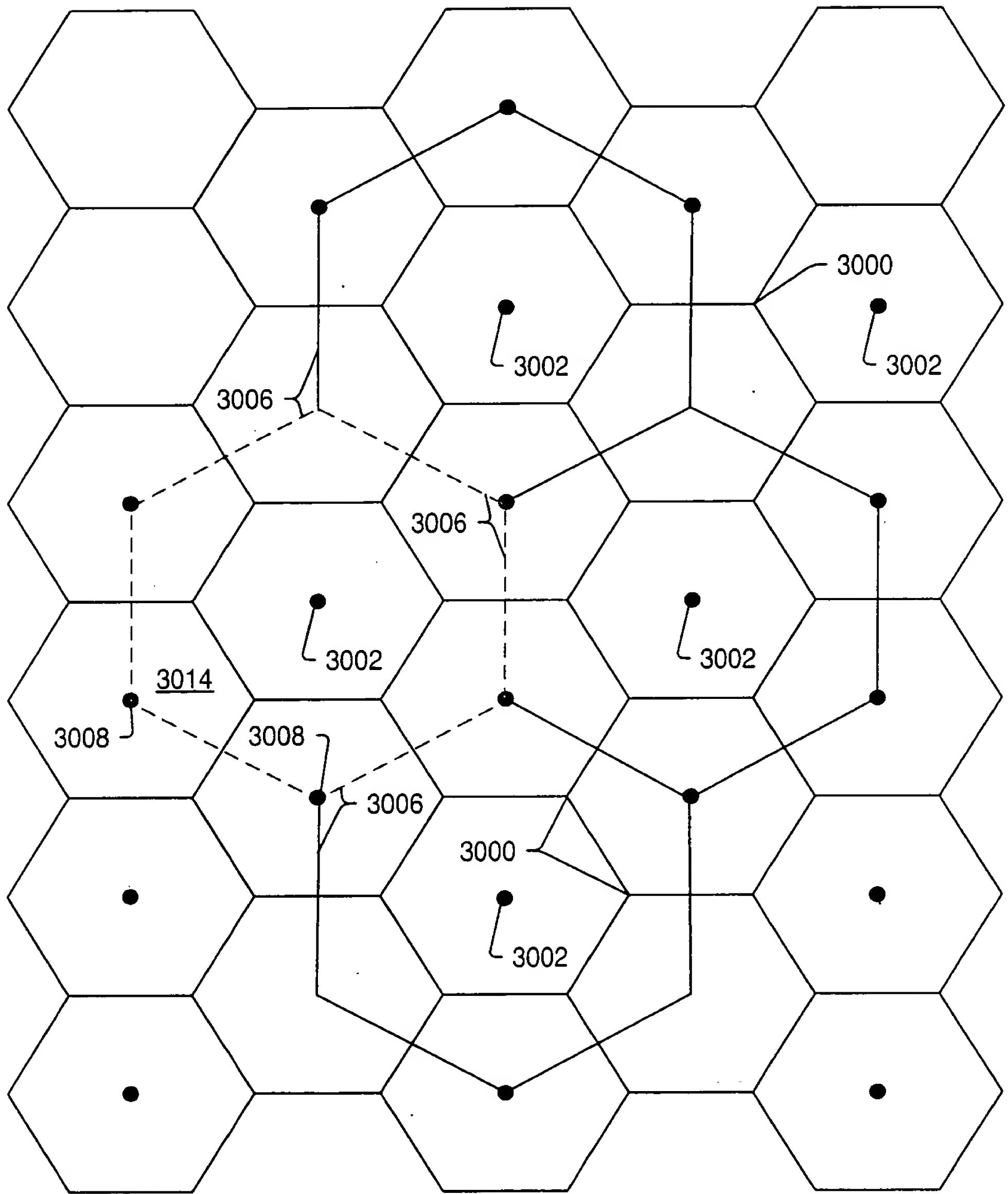


FIG. 75



FIG. 77

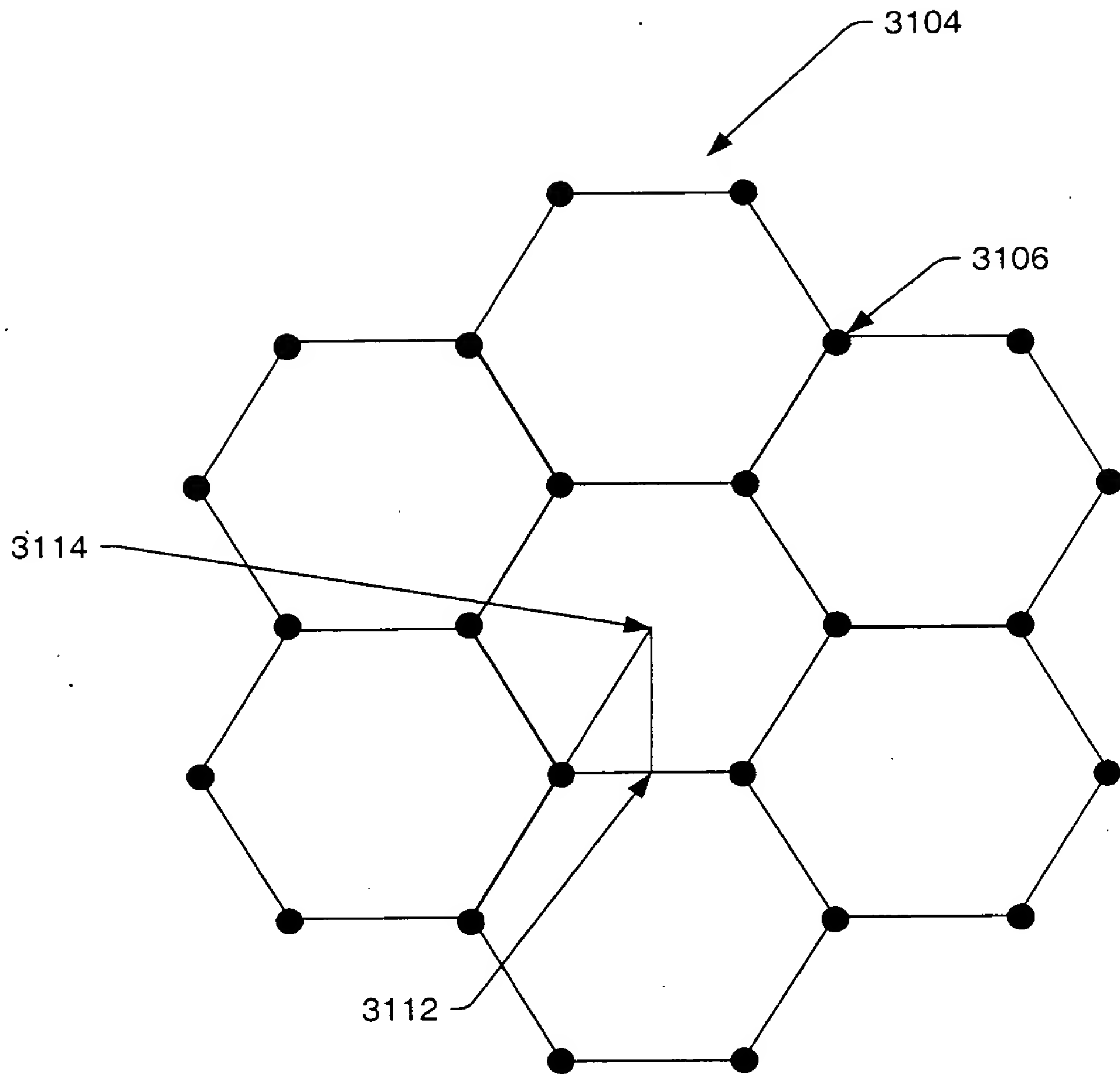


FIG. 77



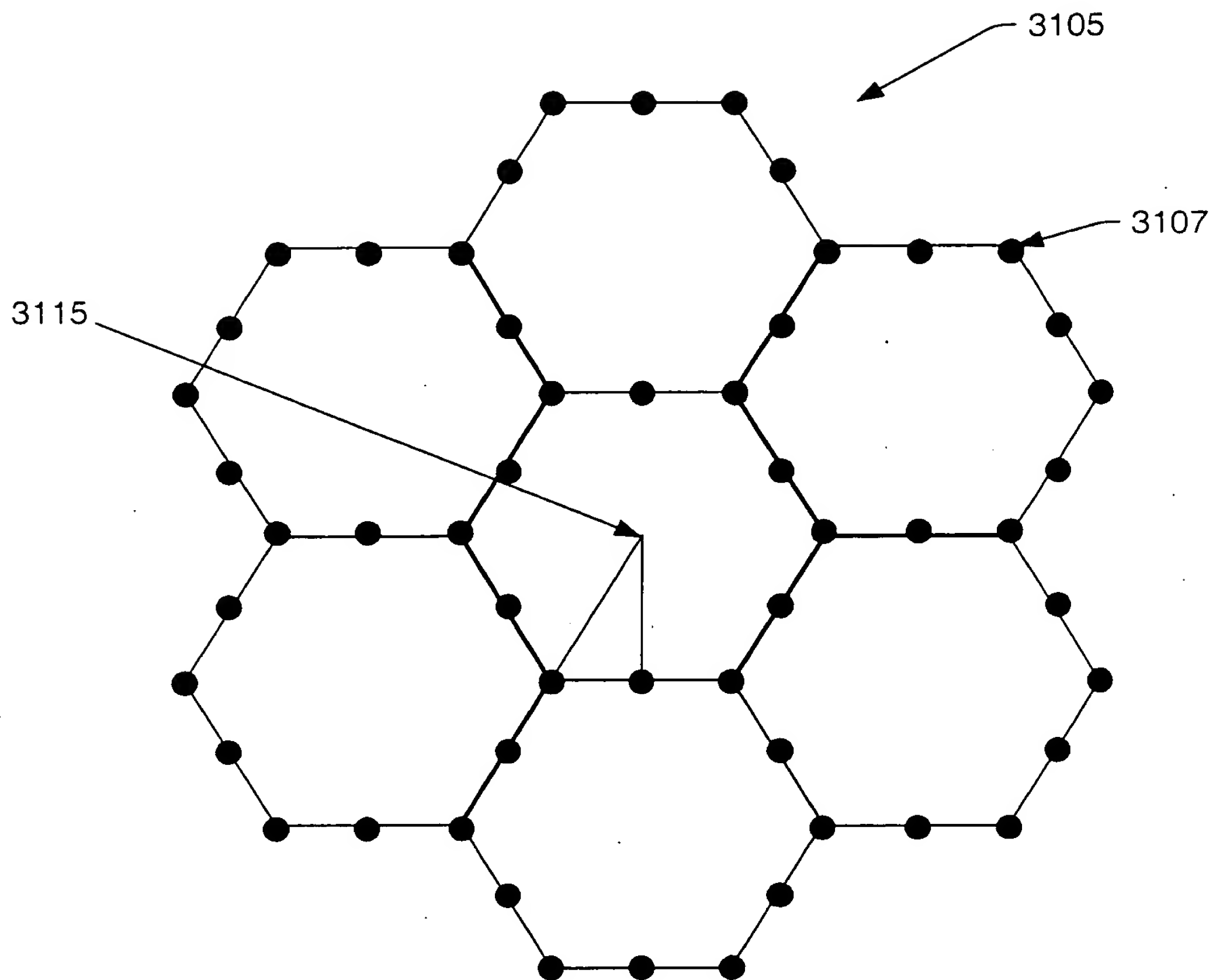


FIG. 77a



FIG. 78 is a 3D surface plot of the temperature distribution T (°C) as a function of the spatial coordinates x and y. The plot shows a complex, multi-peaked surface with a maximum temperature of approximately 600°C. The x and y axes range from -10 to 10, and the temperature axis ranges from 500 to 600°C.

3110

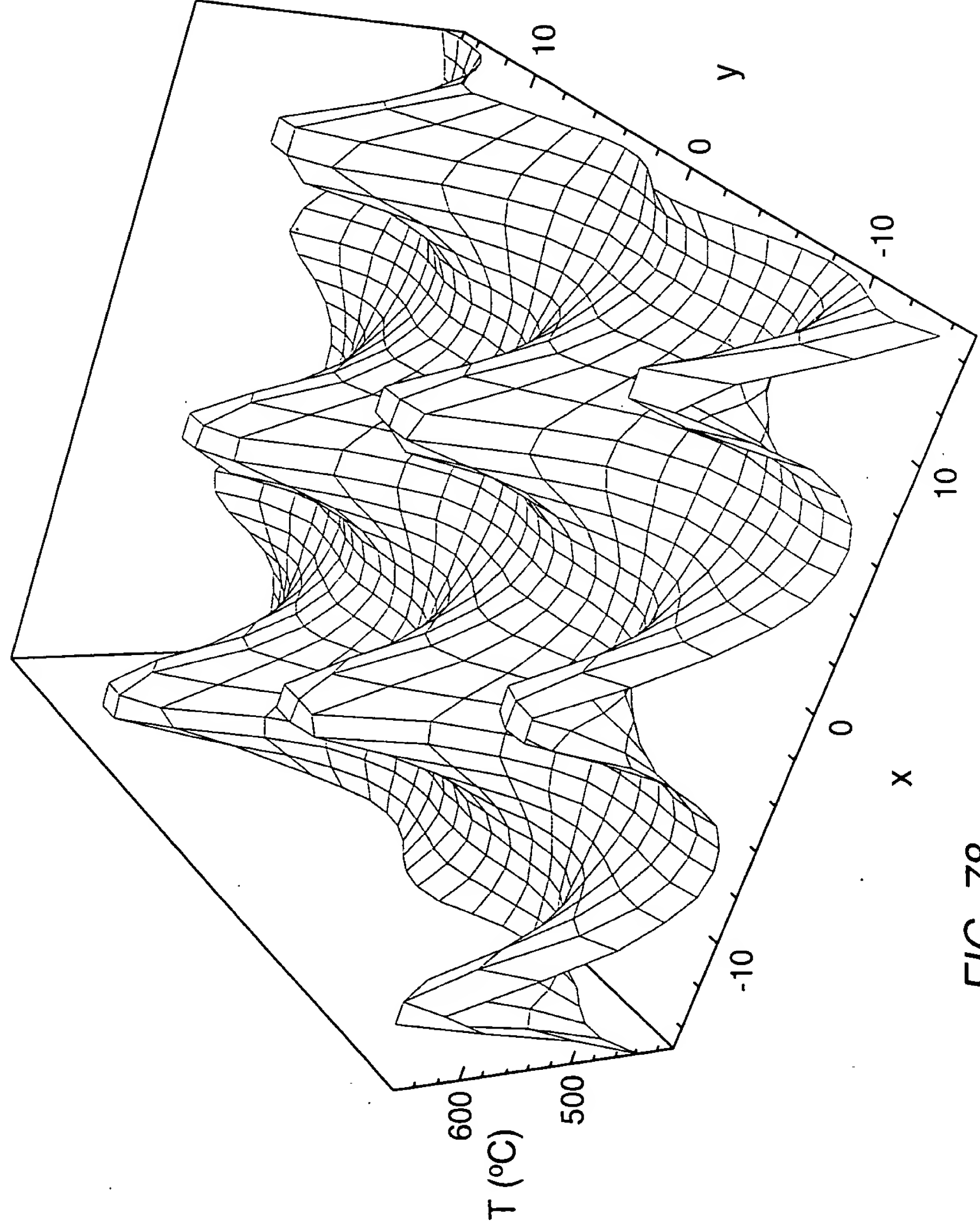


FIG. 78



3108

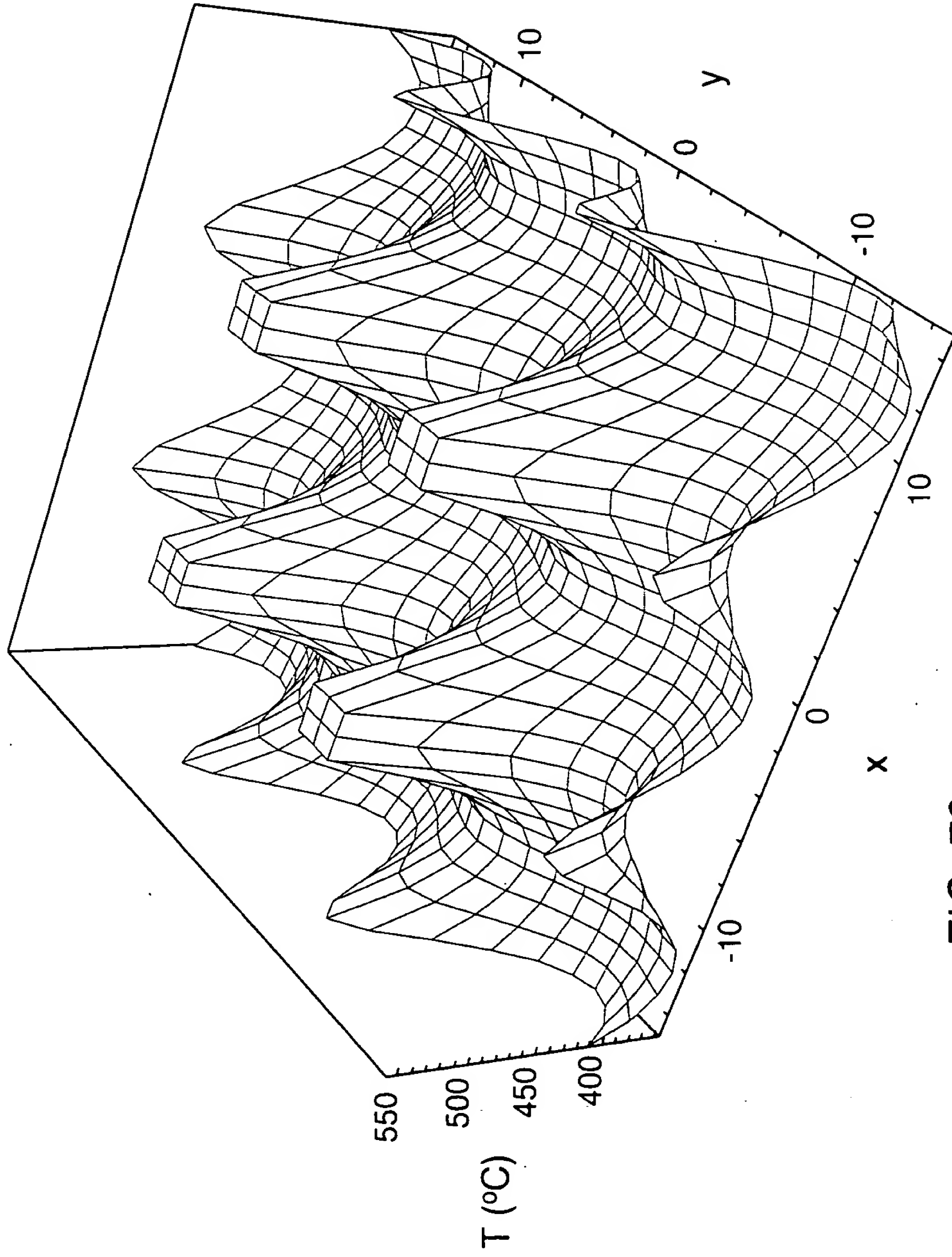


FIG. 79



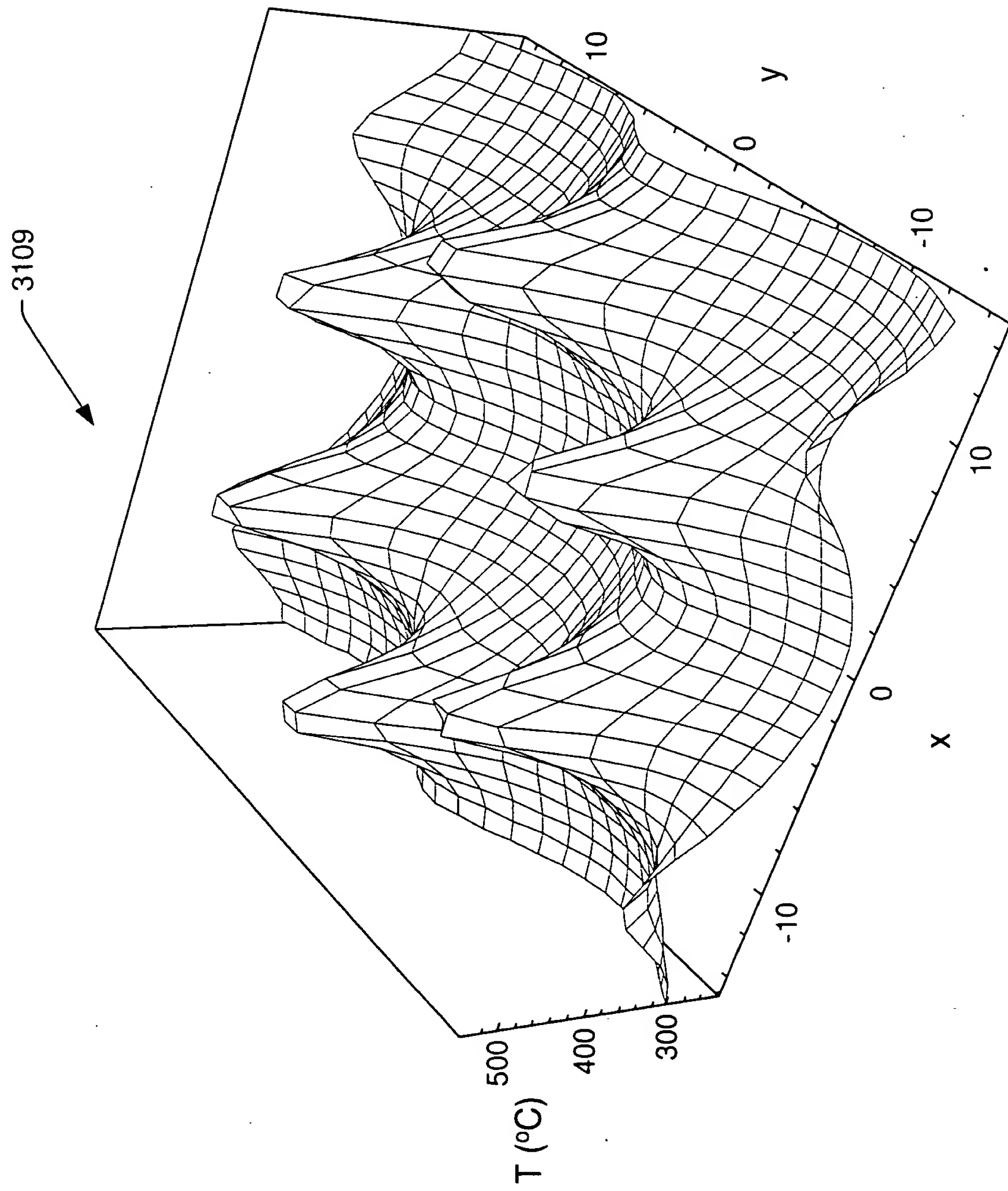


FIG. 79a



FIG. 80

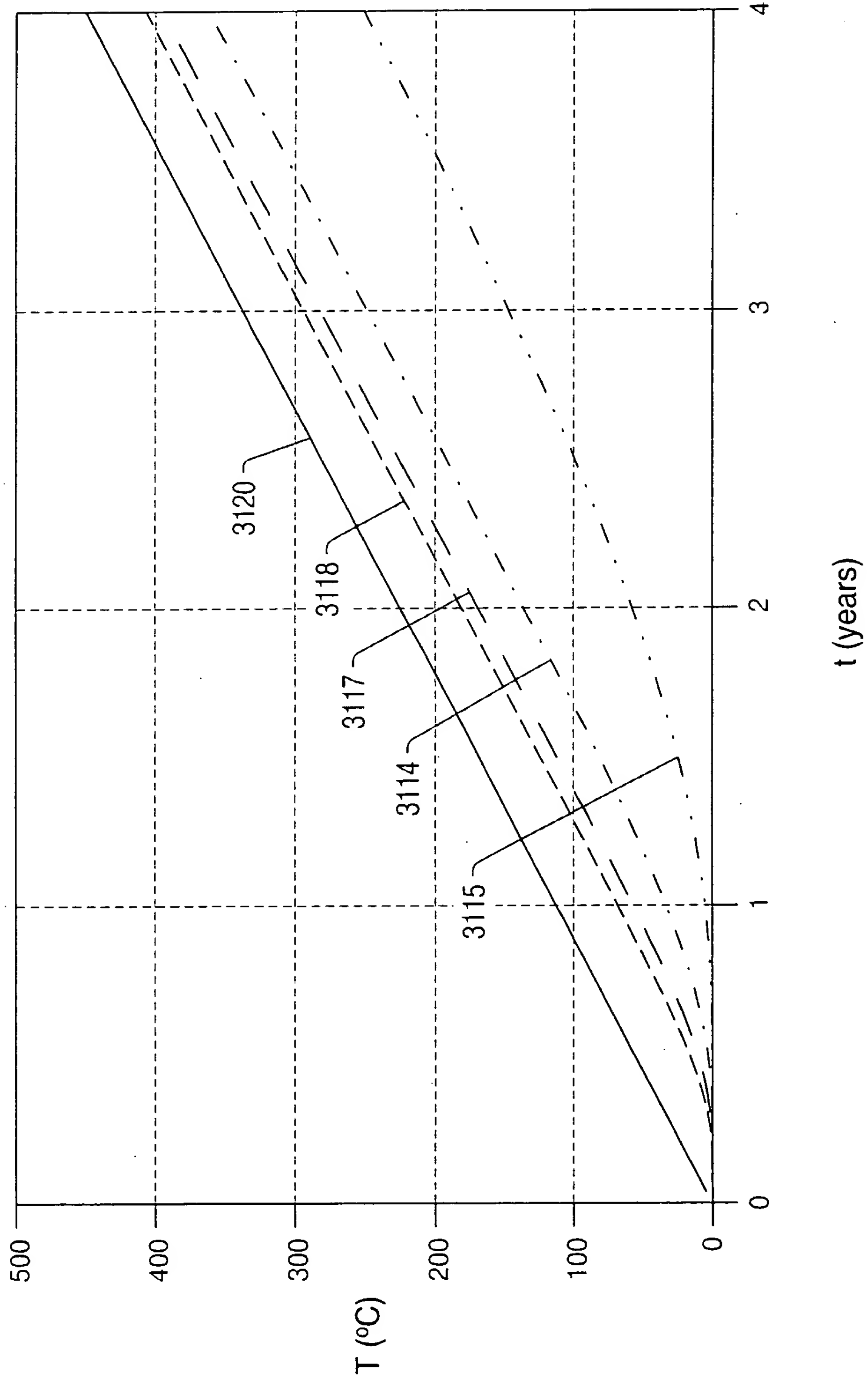


FIG. 80



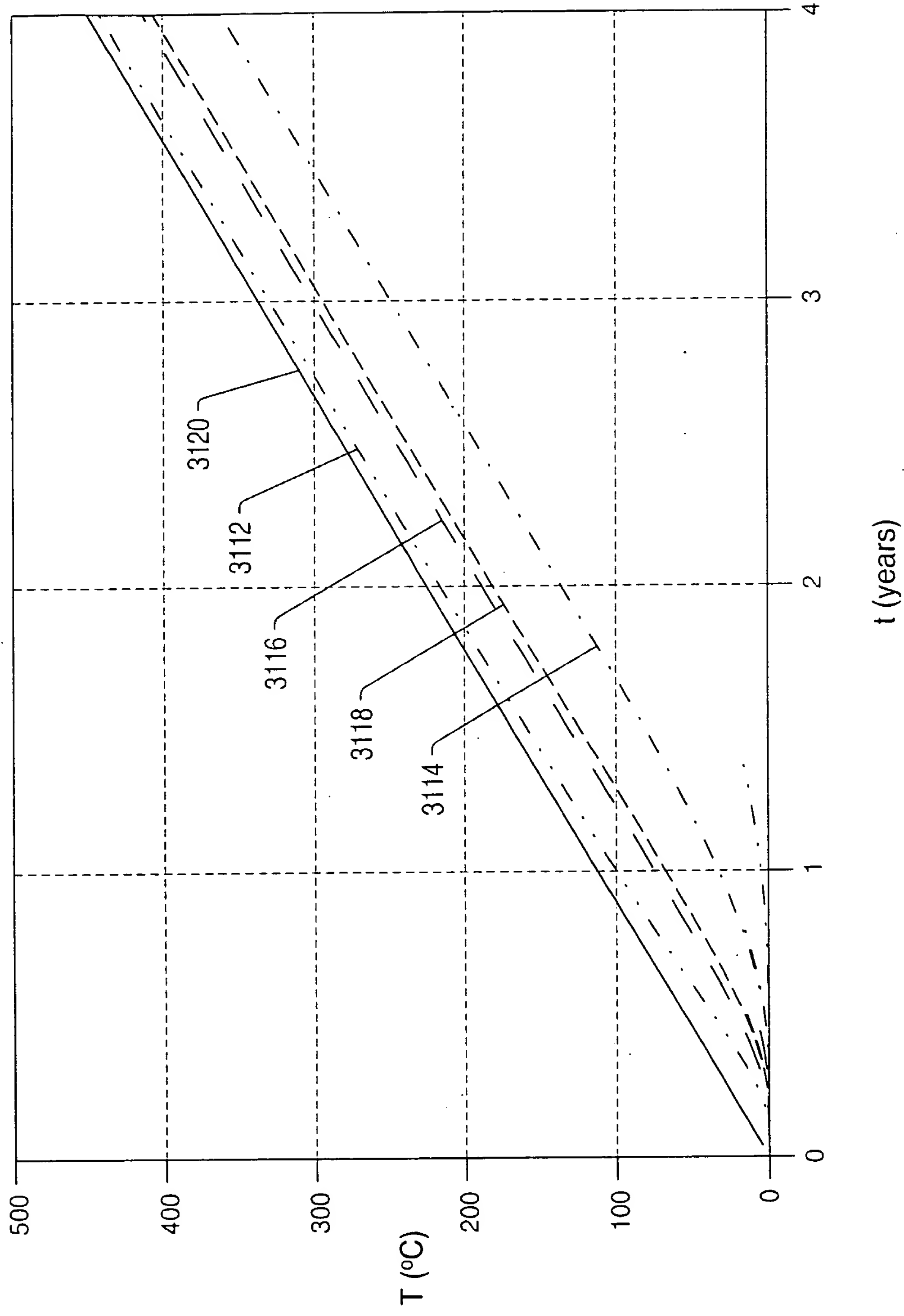


FIG. 81



FIG. 81b

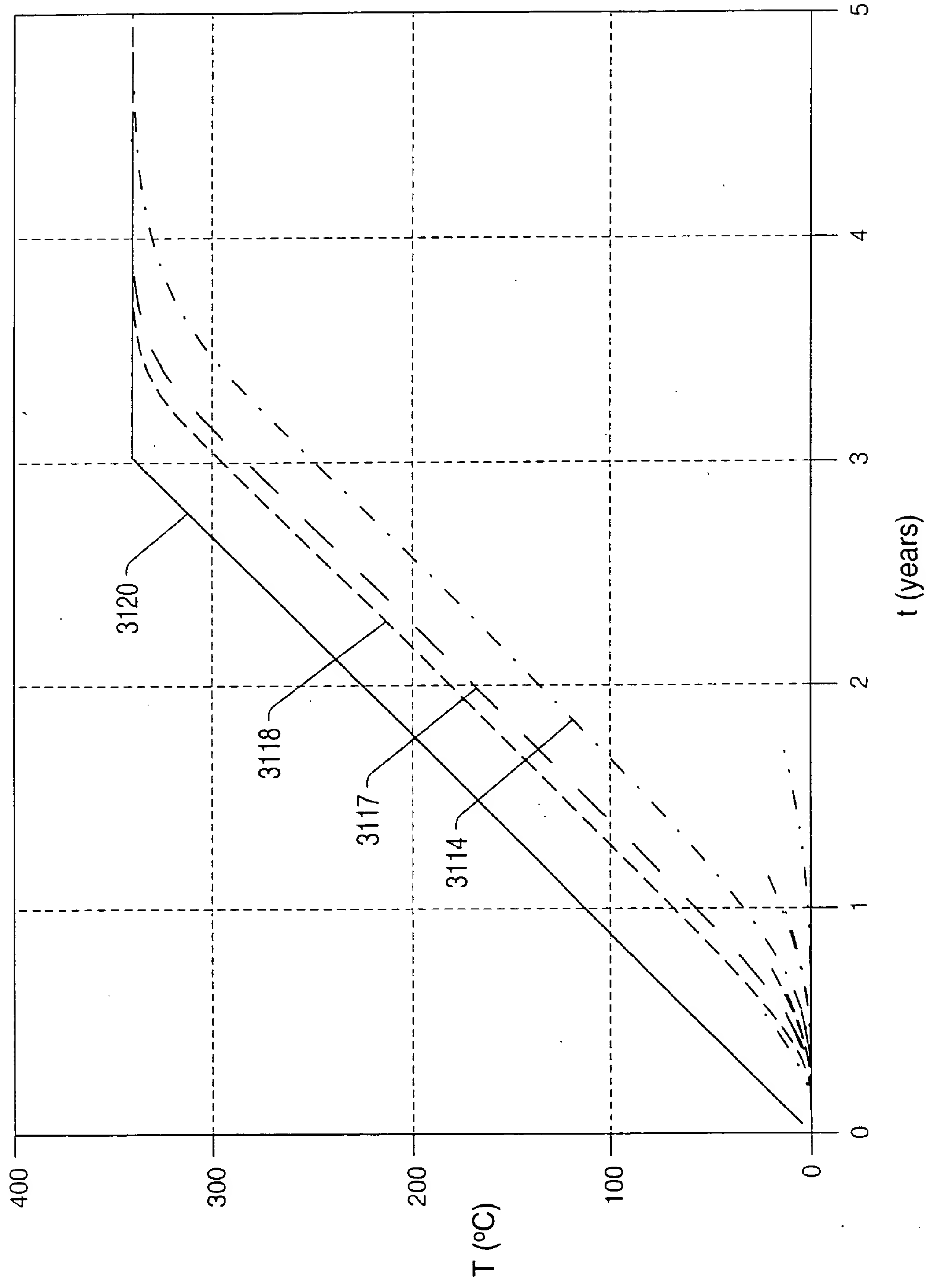


FIG. 81b



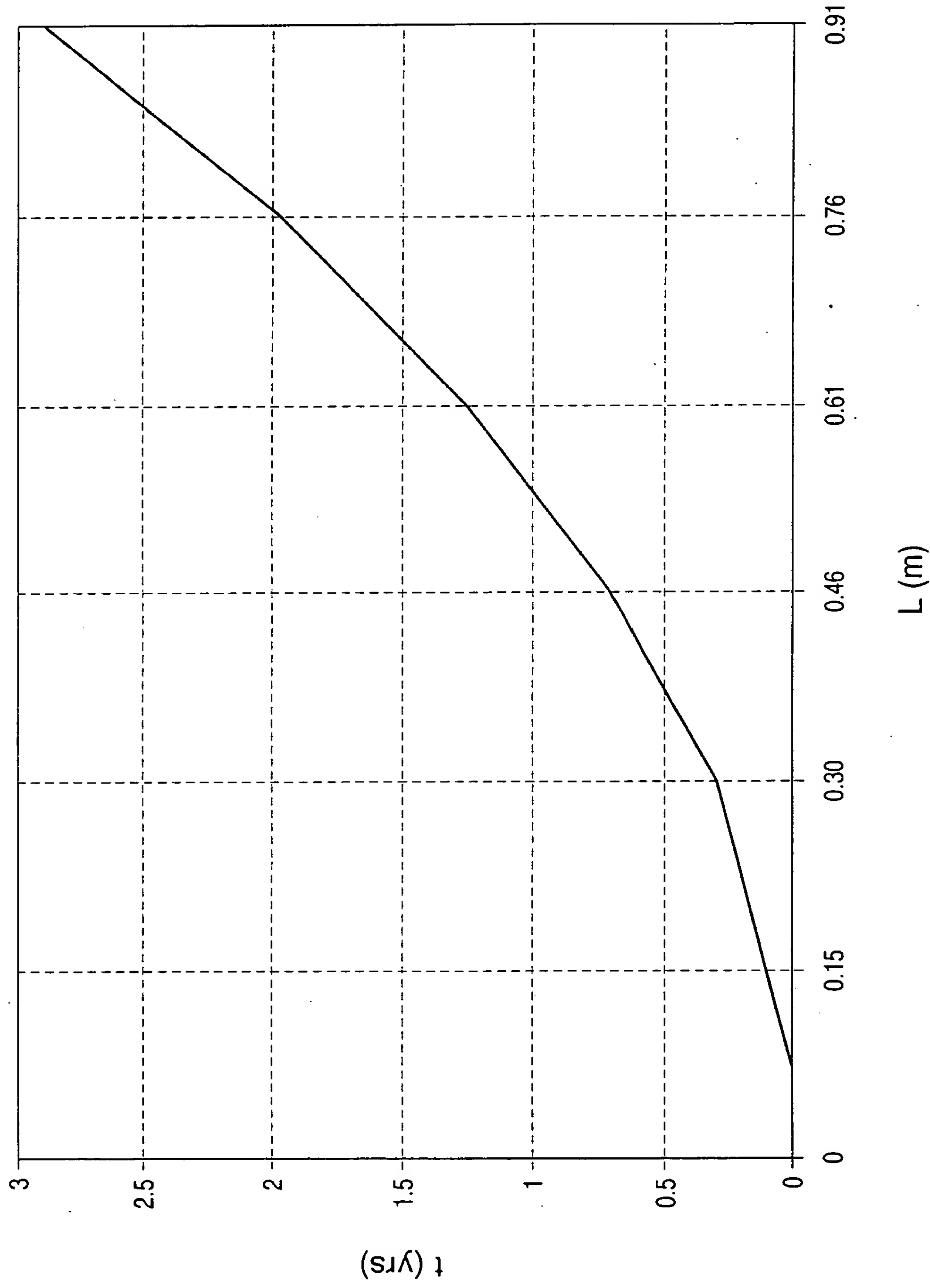


FIG. 82



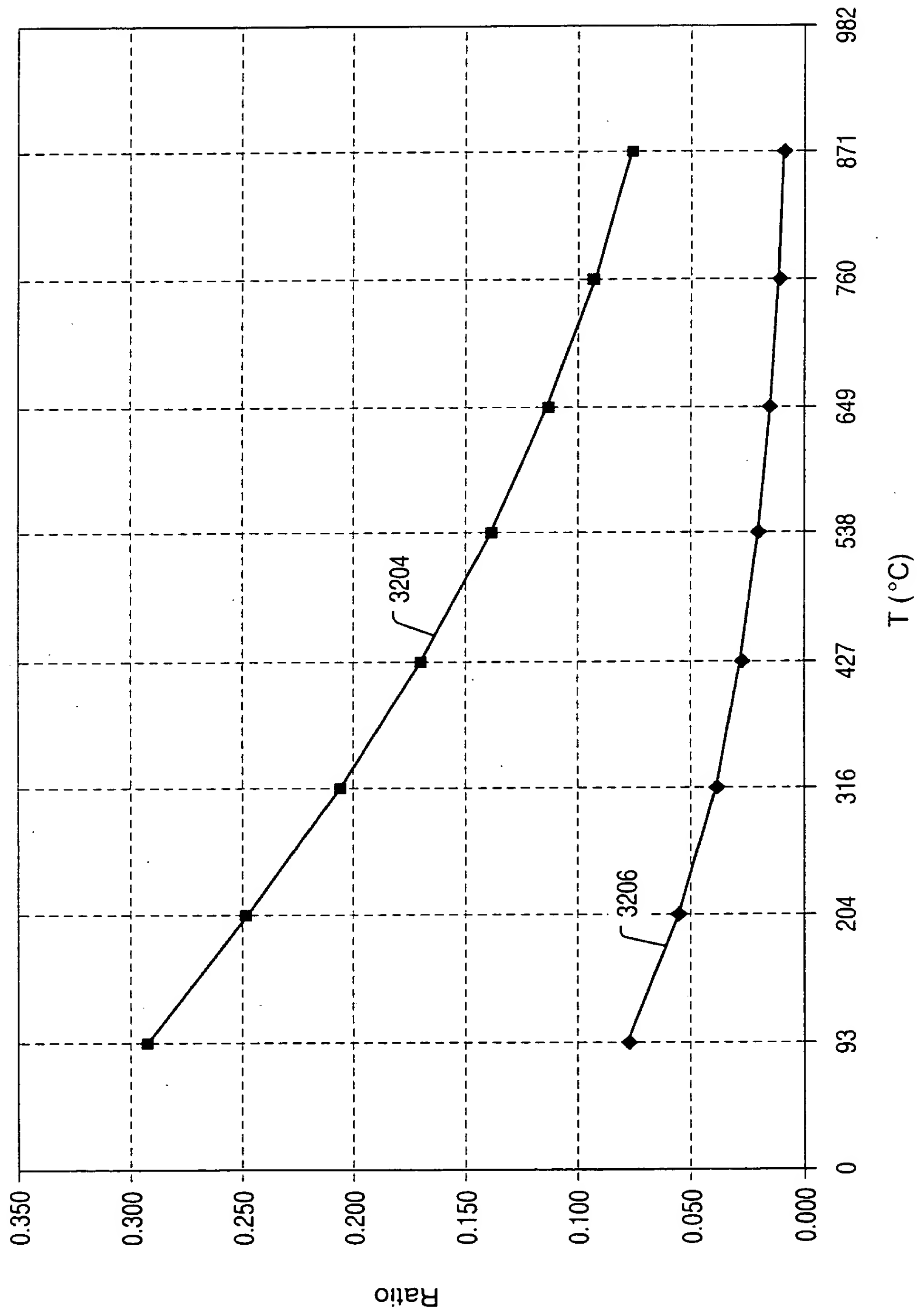


FIG. 83



FIG. 84

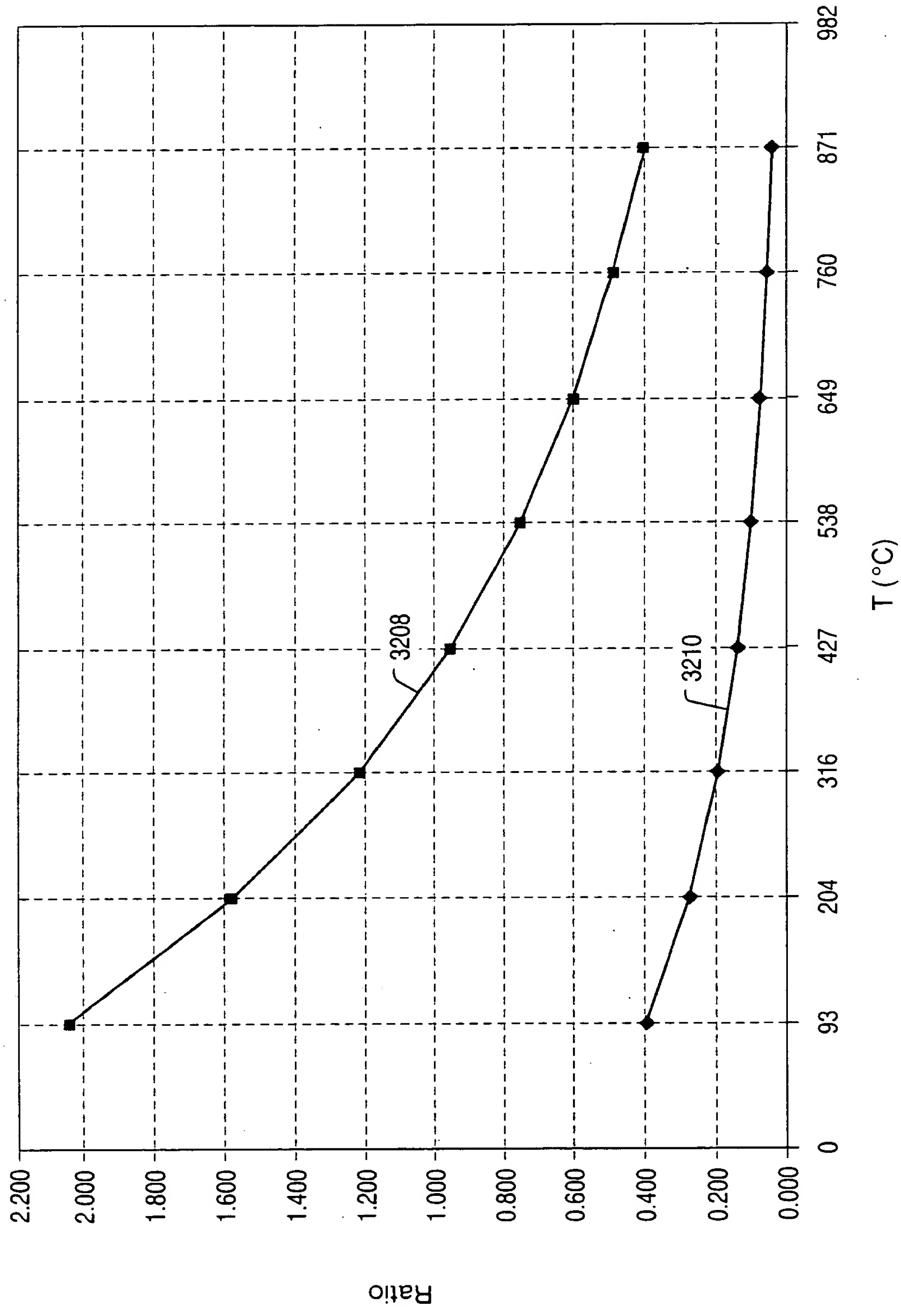


FIG. 84



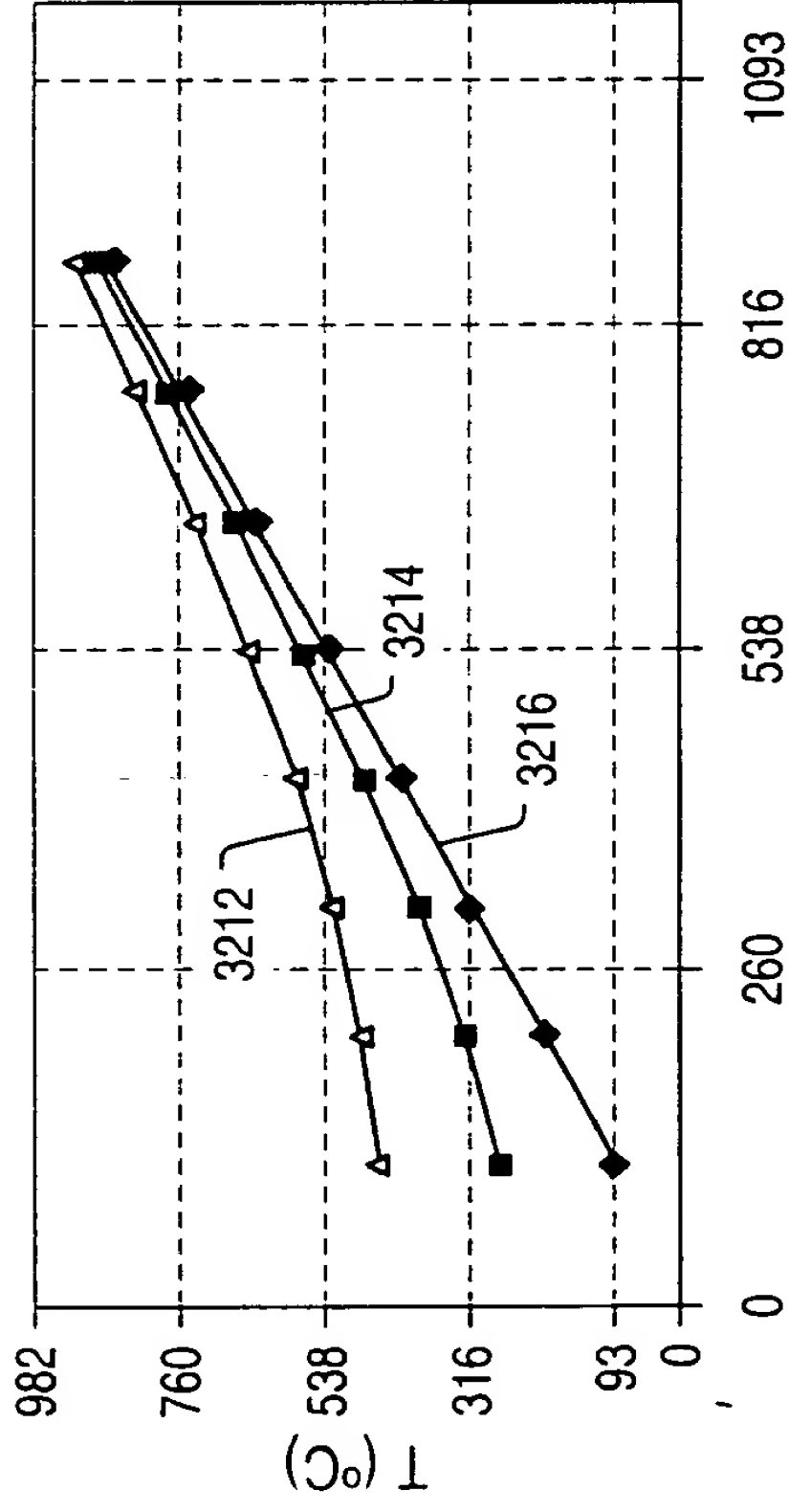


FIG. 85

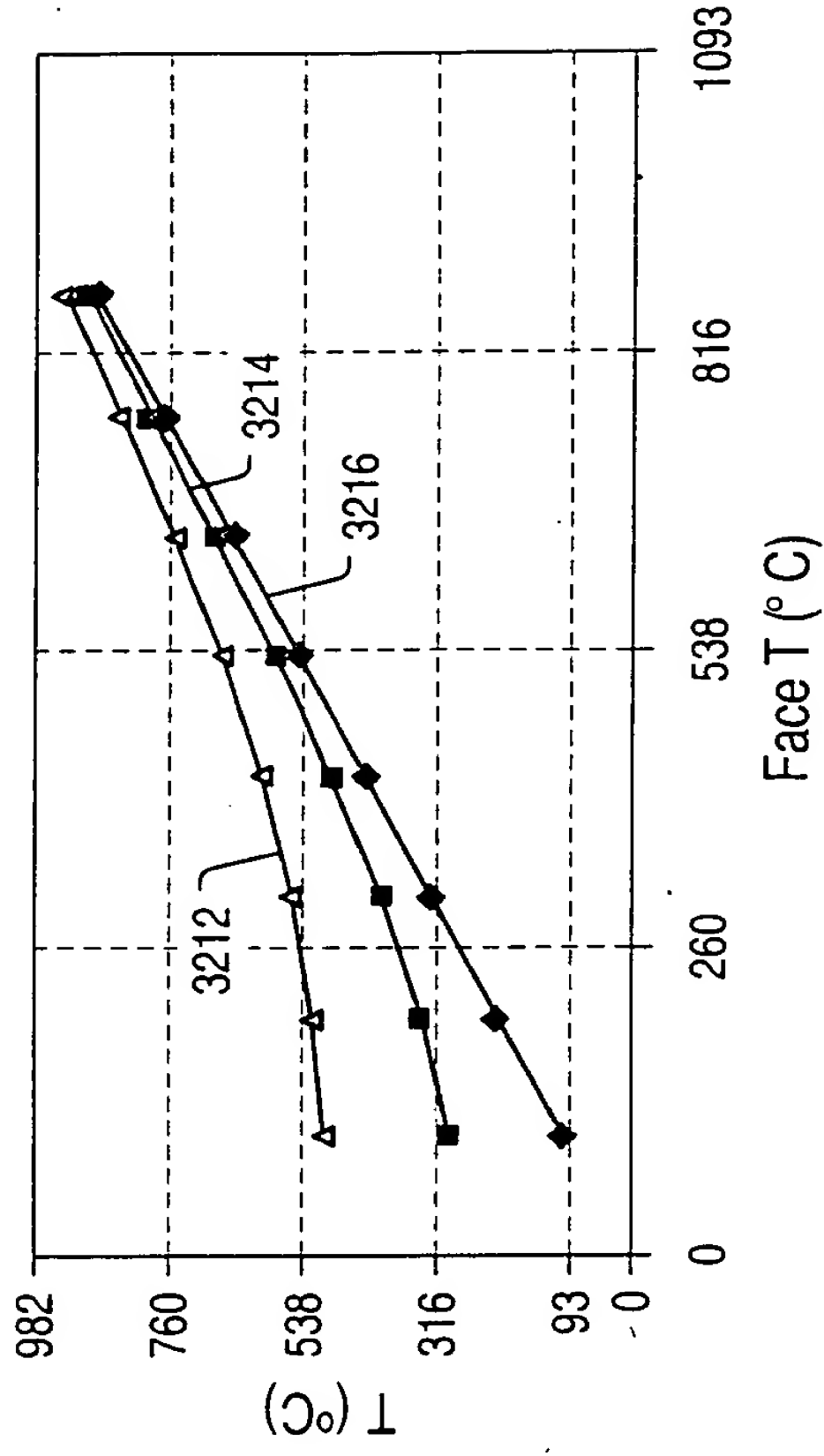


FIG. 86

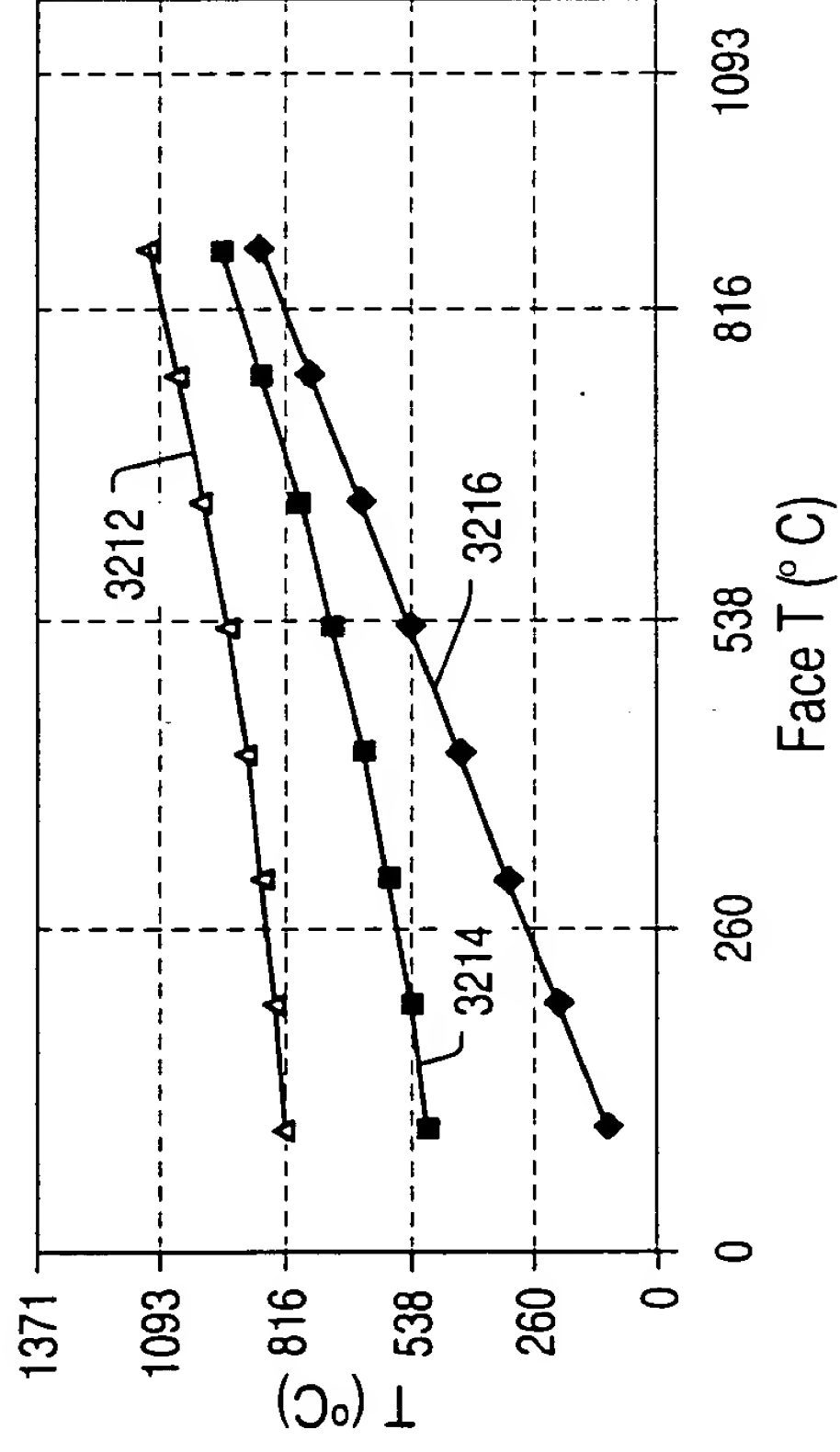


FIG. 87

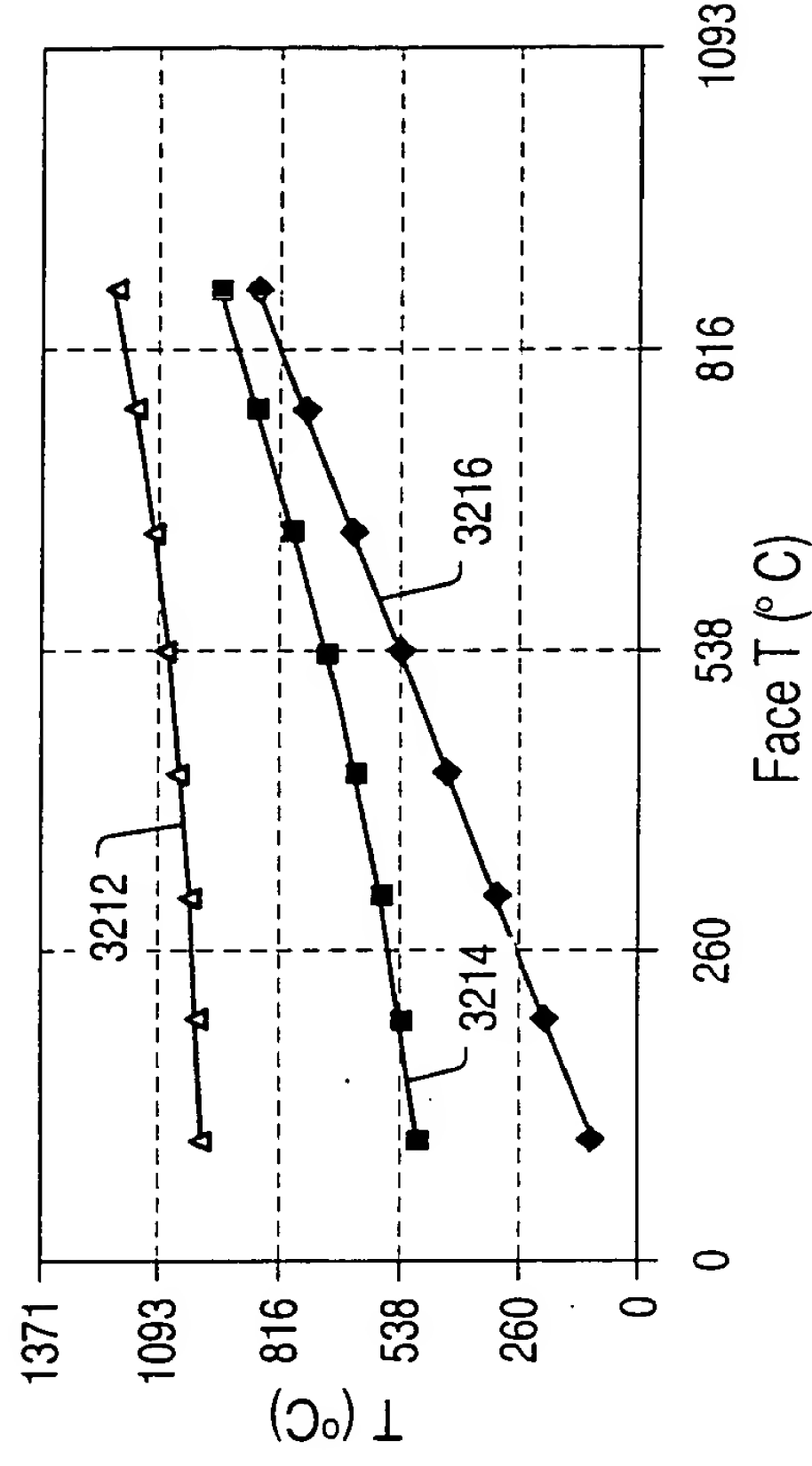


FIG. 88



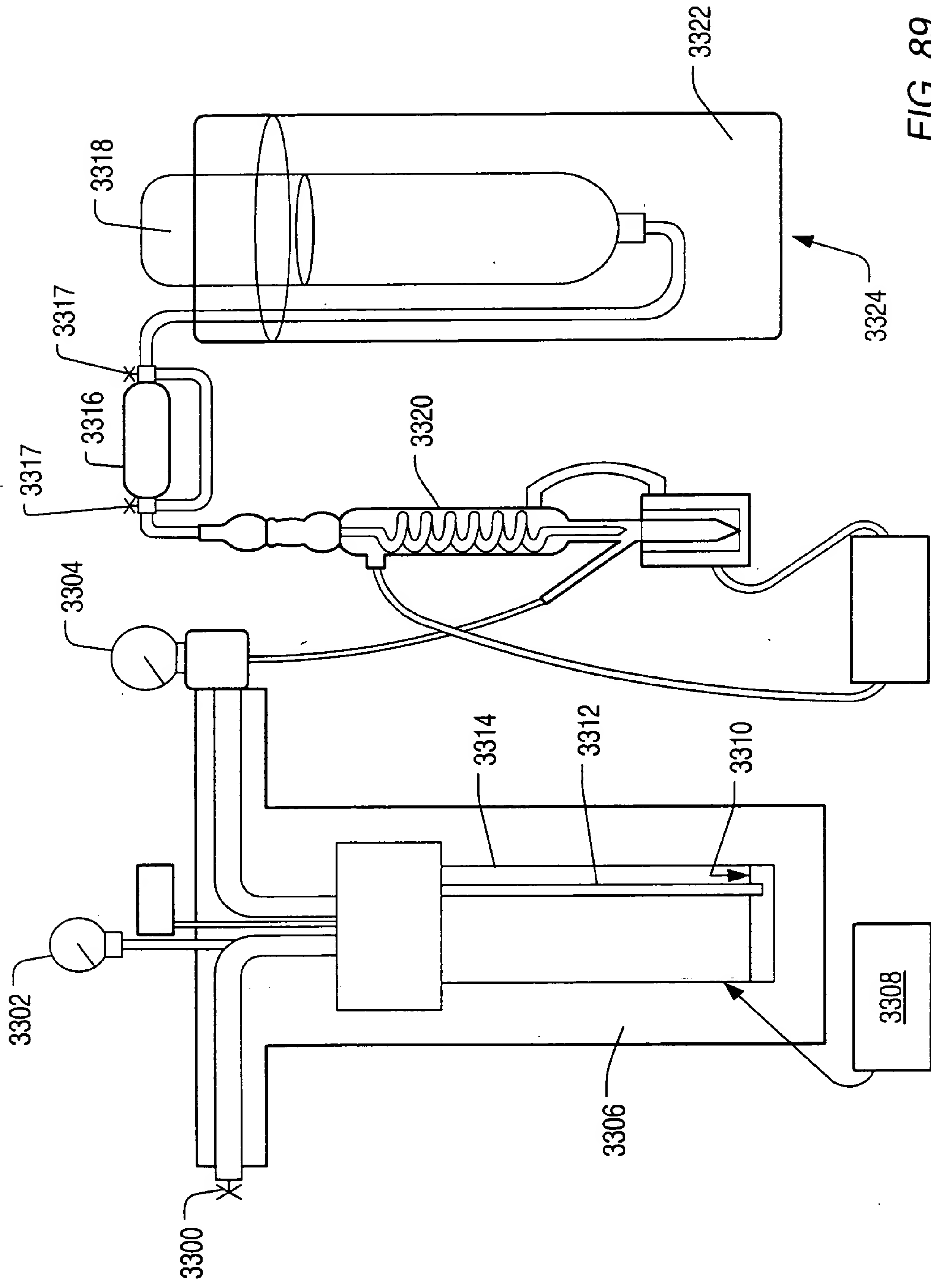


FIG. 89



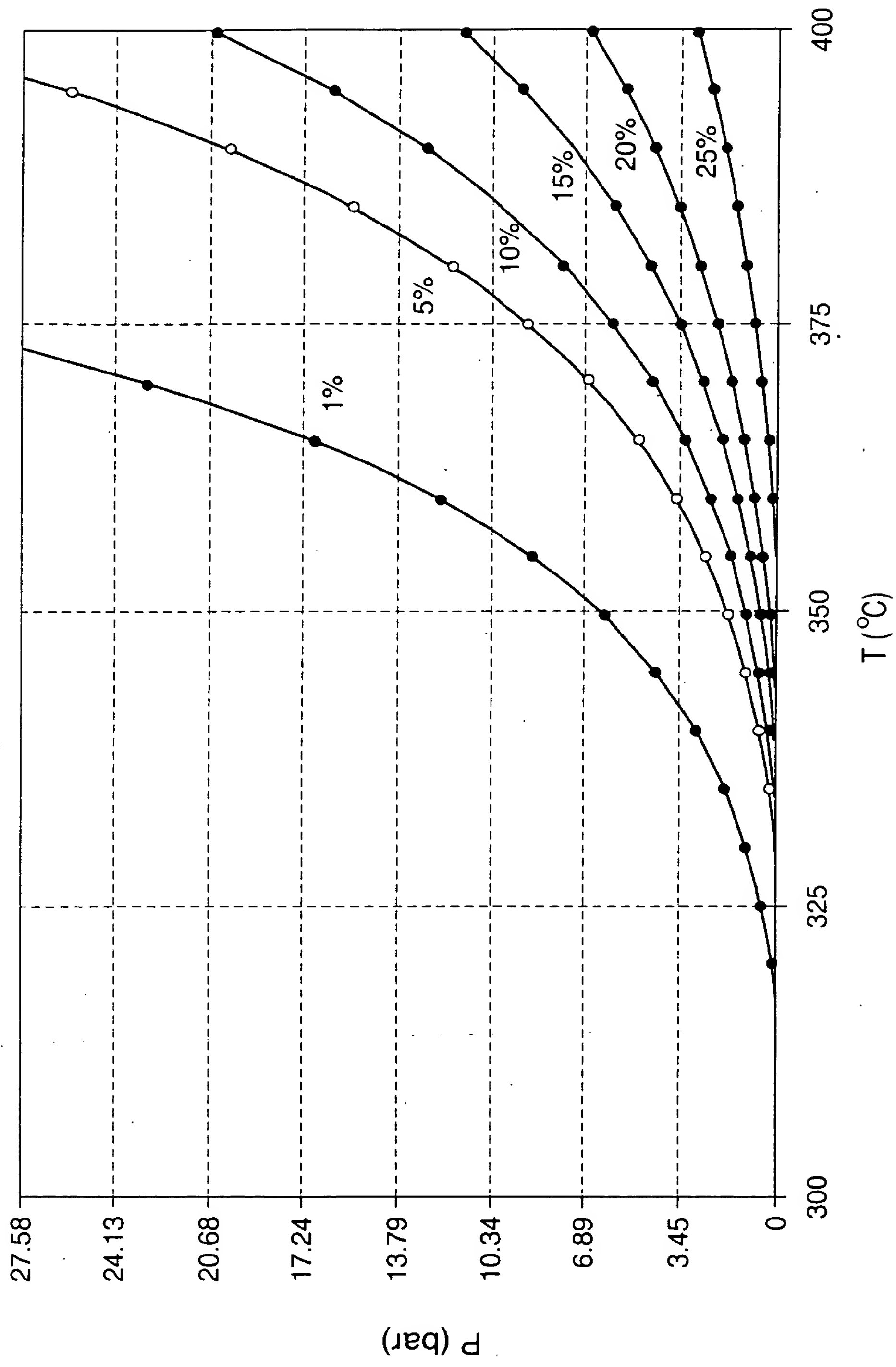


FIG. 90



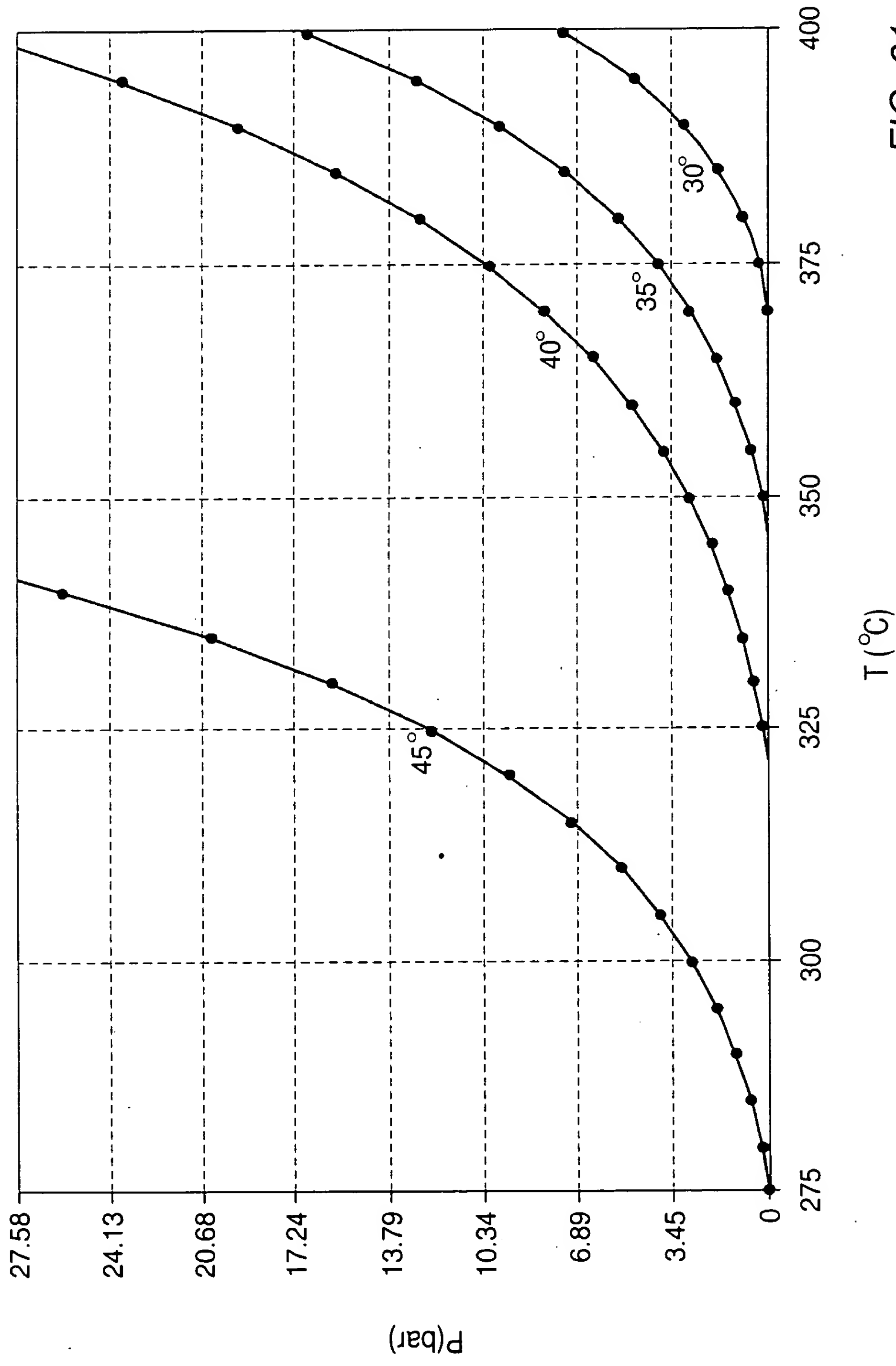


FIG. 91



Pressure (bar) vs. Temperature (°C)

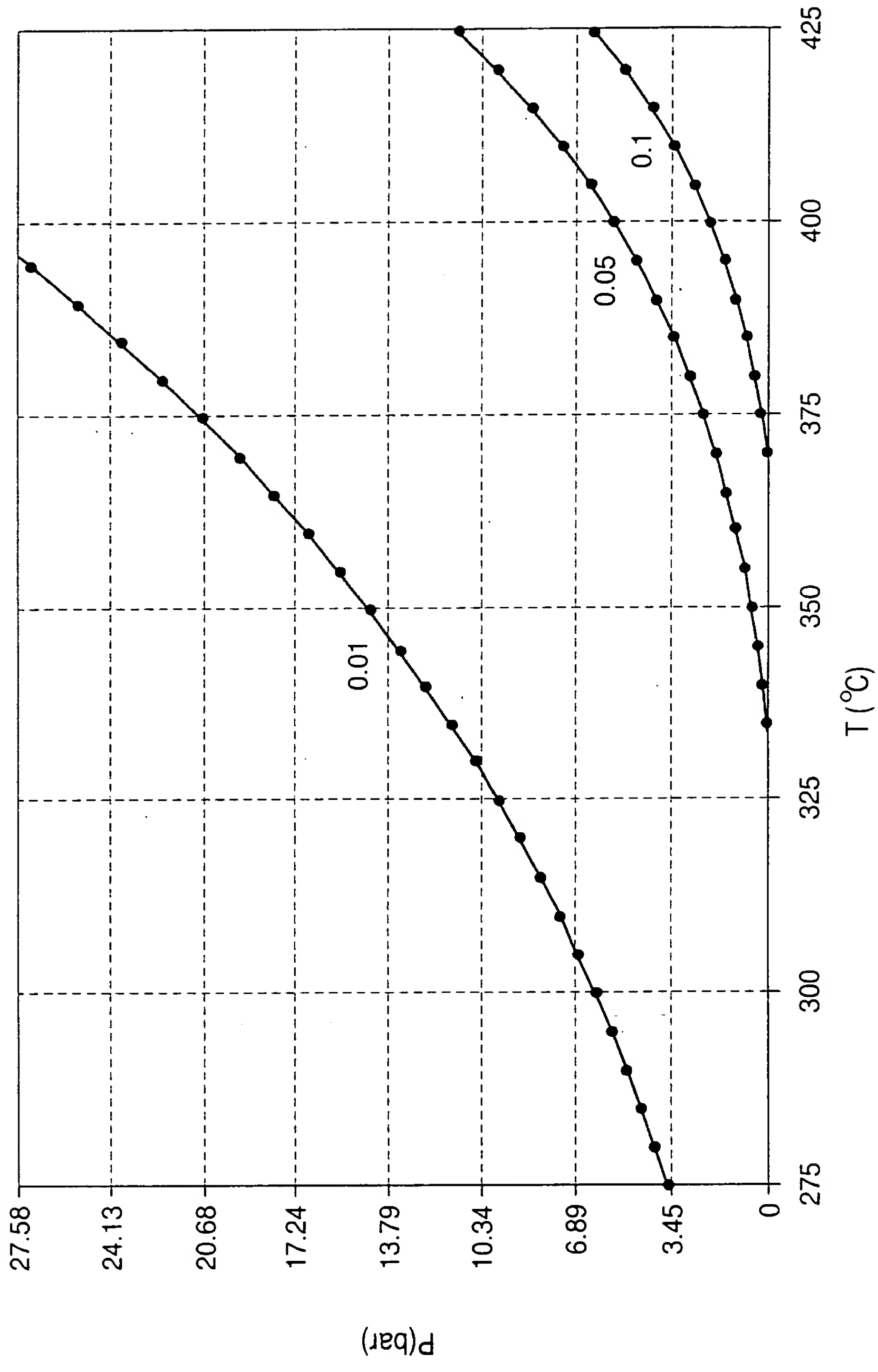


FIG. 92



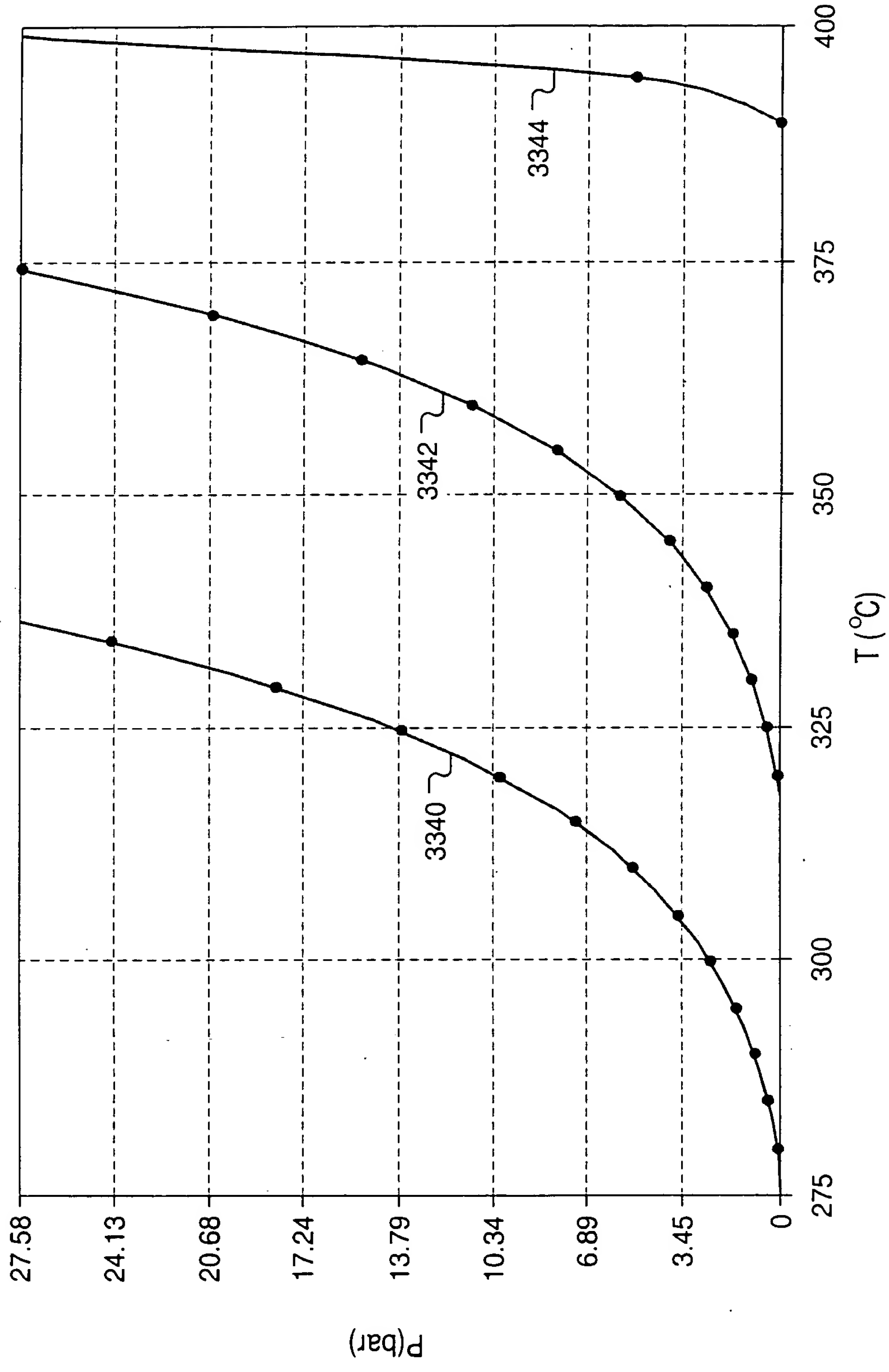


FIG. 93



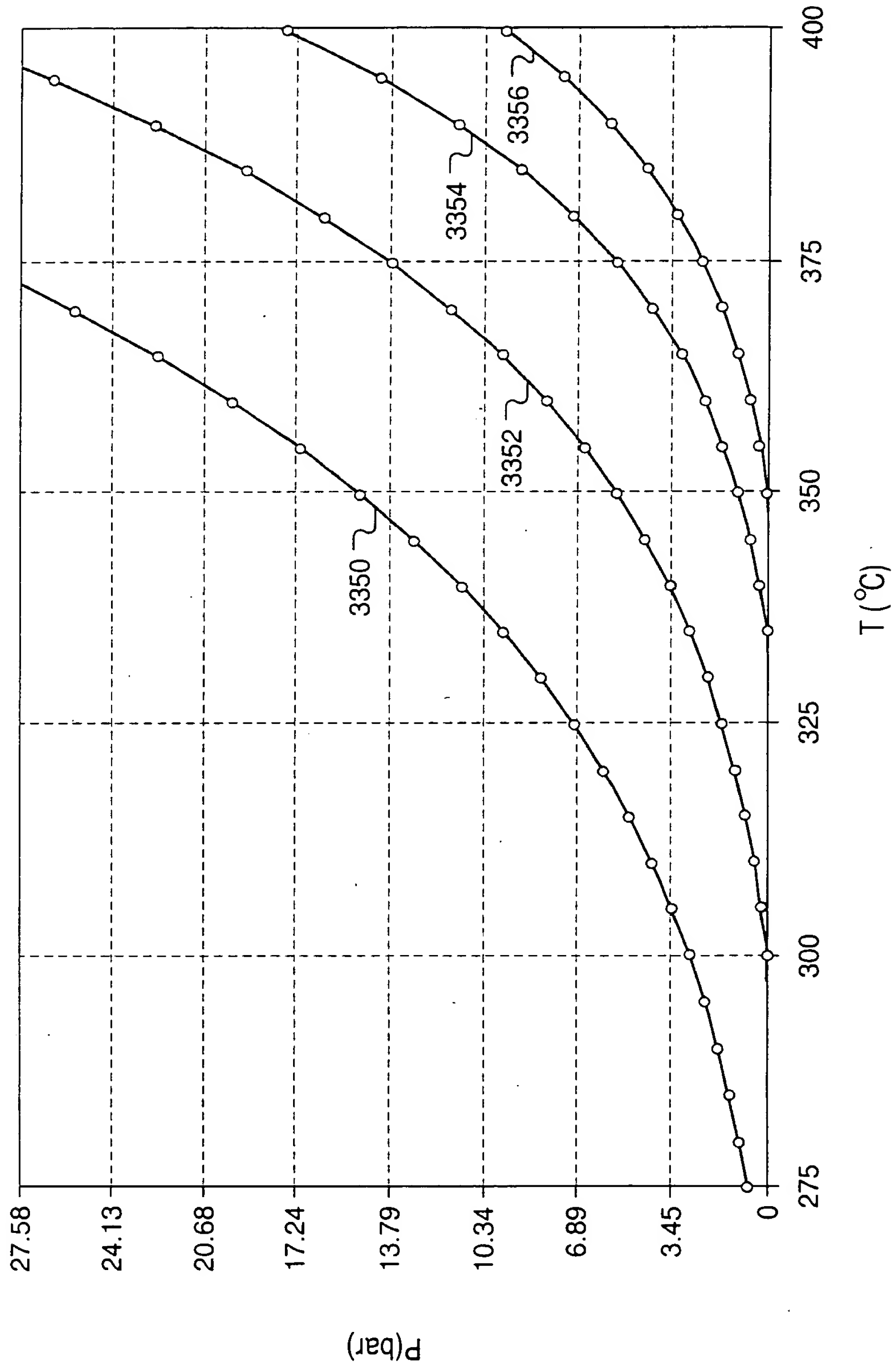


FIG. 94



Figure 95 is a graph showing the relationship between pressure P (bar) and temperature T (°C) for a system. The graph includes three curves labeled 60%, 70%, and 80%, representing different levels of a parameter. The y-axis (P) ranges from 0 to 27.58 bar, and the x-axis (T) ranges from 275 to 400 °C. The curves show that pressure increases with temperature, with higher percentages corresponding to higher pressures at any given temperature.

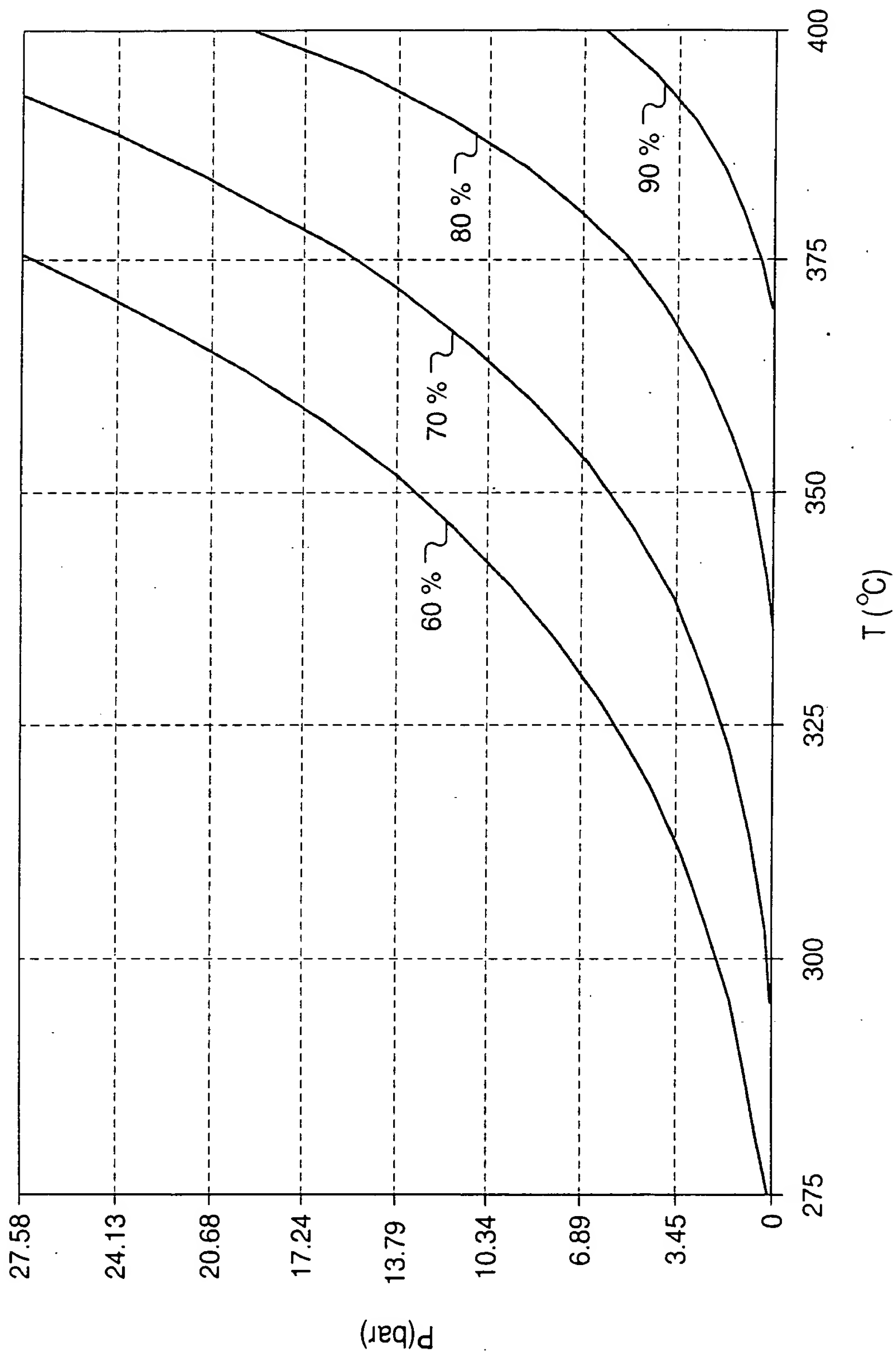


FIG. 95



FIG. 96

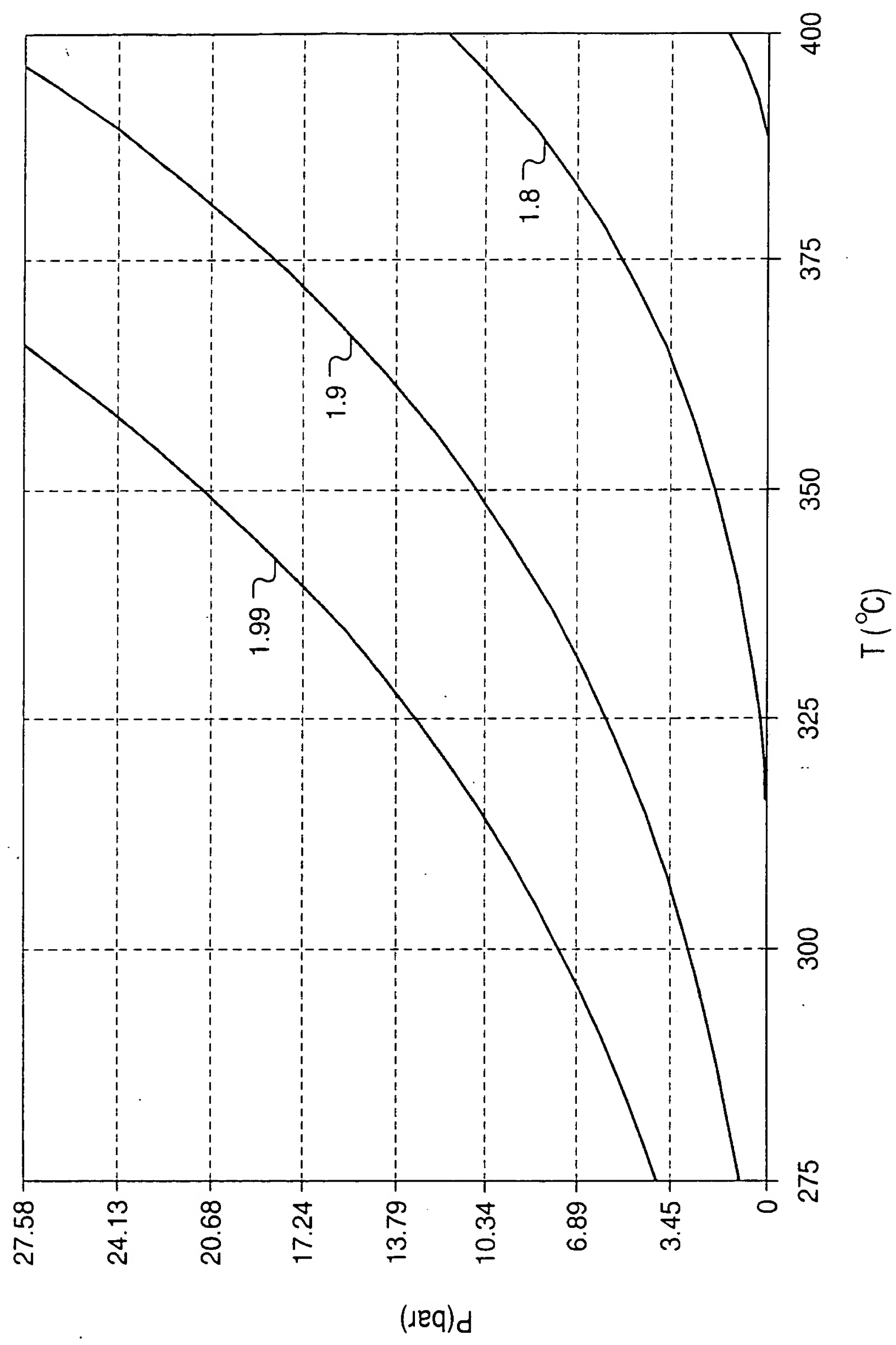


FIG. 96



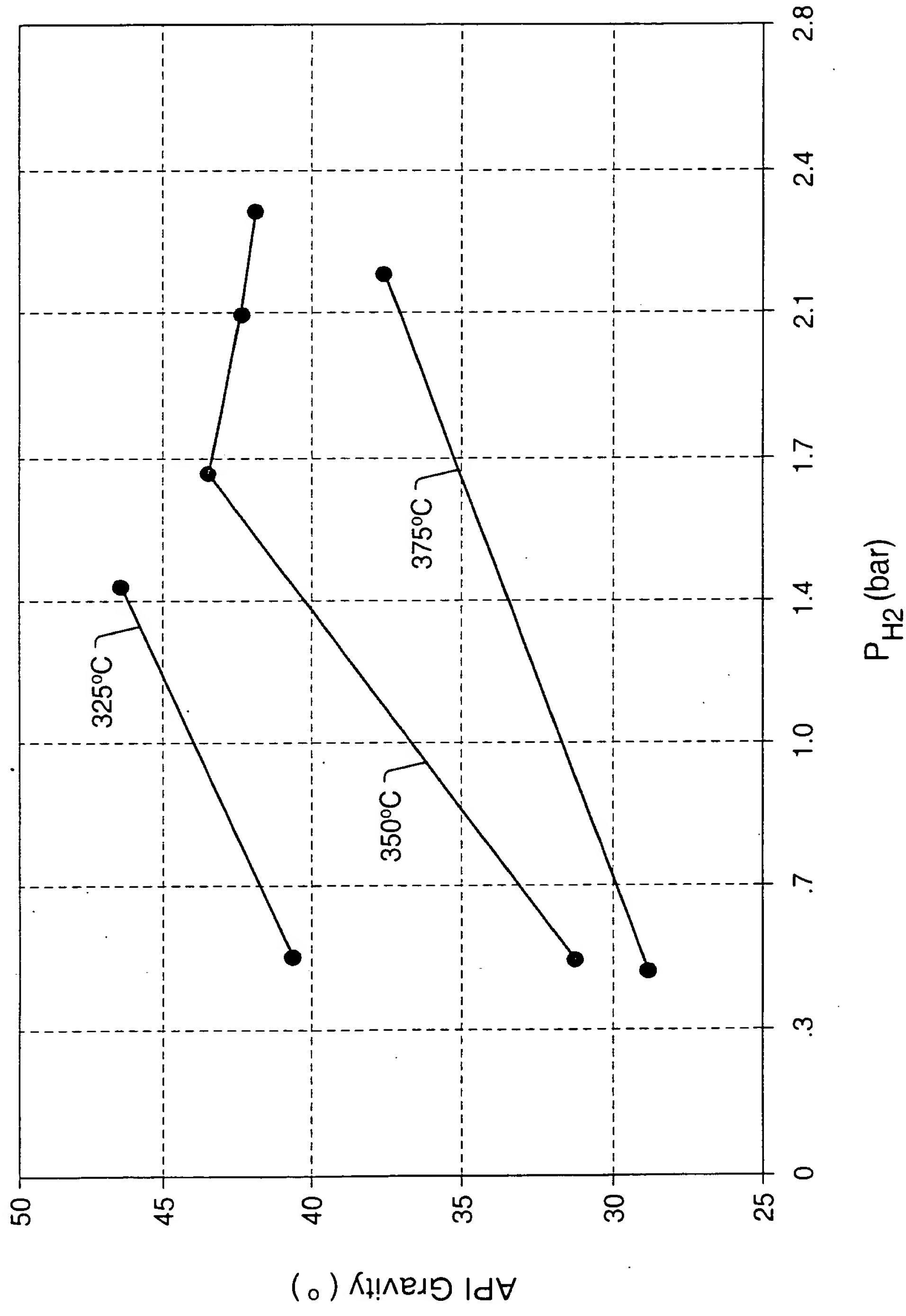
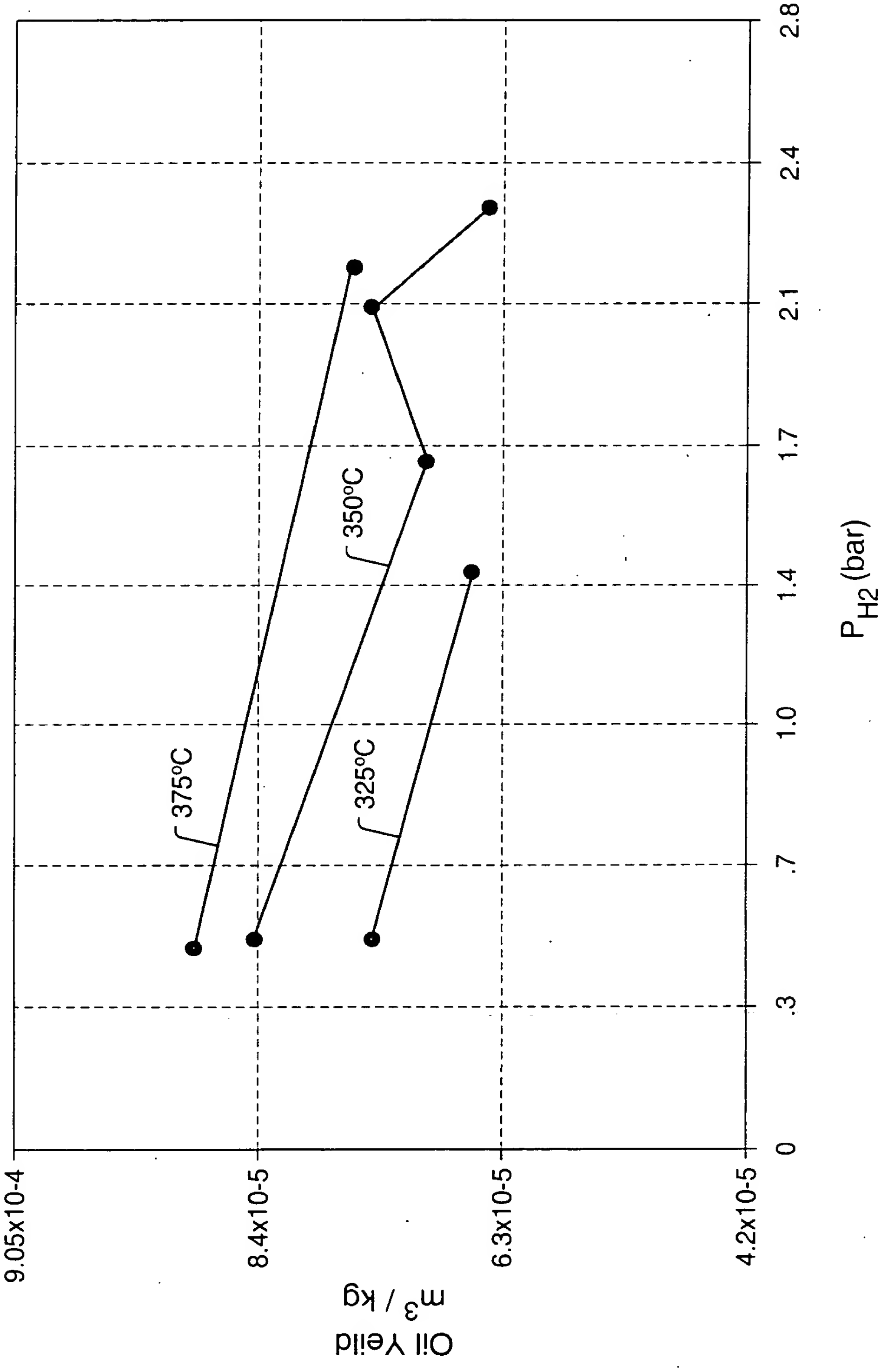


FIG. 98



1978	1979	1980	1981	1982
1983	1984	1985	1986	1987
1988	1989	1990	1991	1992
1993	1994	1995	1996	1997
1998	1999	2000	2001	2002
2003	2004	2005	2006	2007
2008	2009	2010	2011	2012
2013	2014	2015	2016	2017
2018	2019	2020	2021	2022
2023	2024	2025	2026	2027
2028	2029	2030	2031	2032
2033	2034	2035	2036	2037
2038	2039	2040	2041	2042
2043	2044	2045	2046	2047
2048	2049	2050	2051	2052
2053	2054	2055	2056	2057
2058	2059	2060	2061	2062
2063	2064	2065	2066	2067
2068	2069	2070	2071	2072
2073	2074	2075	2076	2077
2078	2079	2080	2081	2082
2083	2084	2085	2086	2087
2088	2089	2090	2091	2092
2093	2094	2095	2096	2097
2098	2099	2100	2101	2102
2103	2104	2105	2106	2107
2108	2109	2110	2111	2112
2113	2114	2115	2116	2117
2118	2119	2120	2121	2122
2123	2124	2125	2126	2127
2128	2129	2130	2131	2132
2133	2134	2135	2136	2137
2138	2139	2140	2141	2142
2143	2144	2145	2146	2147
2148	2149	2150	2151	2152
2153	2154	2155	2156	2157
2158	2159	2160	2161	2162
2163	2164	2165	2166	2167
2168	2169	2170	2171	2172
2173	2174	2175	2176	2177
2178	2179	2180	2181	2182
2183	2184	2185	2186	2187
2188	2189	2190	2191	2192
2193	2194	2195	2196	2197
2198	2199	2200	2201	2202
2203	2204	2205	2206	2207
2208	2209	2210	2211	2212
2213	2214	2215	2216	2217
2218	2219	2220	2221	2222
2223	2224	2225	2226	2227
2228	2229	2230	2231	2232
2233	2234	2235	2236	2237
2238	2239	2240	2241	2242
2243	2244	2245	2246	2247
2248	2249	2250	2251	2252
2253	2254	2255	2256	2257
2258	2259	2260	2261	2262
2263	2264	2265	2266	2267
2268	2269	2270	2271	2272
2273	2274	2275	2276	2277
2278	2279	2280	2281	2282
2283	2284	2285	2286	2287
2288	2289	2290	2291	2292
2293	2294	2295	2296	2297
2298	2299	2300	2301	2302
2303	2304	2305	2306	2307
2308	2309	2310	2311	2312
2313	2314	2315	2316	2317
2318	2319	2320	2321	2322
2323	2324	2325	2326	2327
2328	2329	2330	2331	2332
2333	2334	2335	2336	2337
2338	2339	2340	2341	2342
2343	2344	2345	2346	2347
2348	2349	2350	2351	2352
2353	2354	2355	2356	2357
2358	2359	2360	2361	2362
2363	2364	2365	2366	2367
2368	2369	2370	2371	2372
2373	2374	2375	2376	2377
2378	2379	2380	2381	2382
2383	2384	2385	2386	



**FIG. 99**



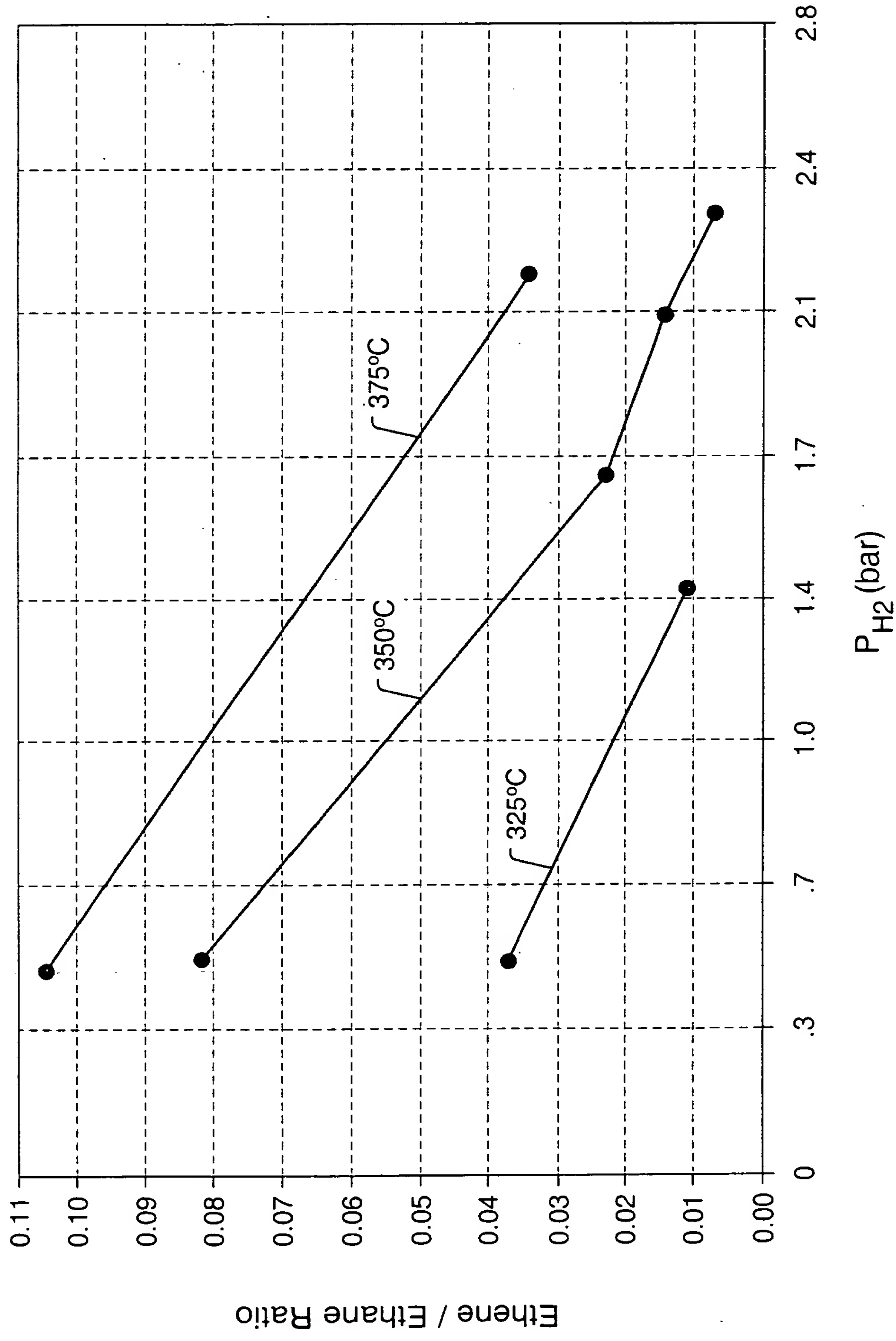


FIG. 100



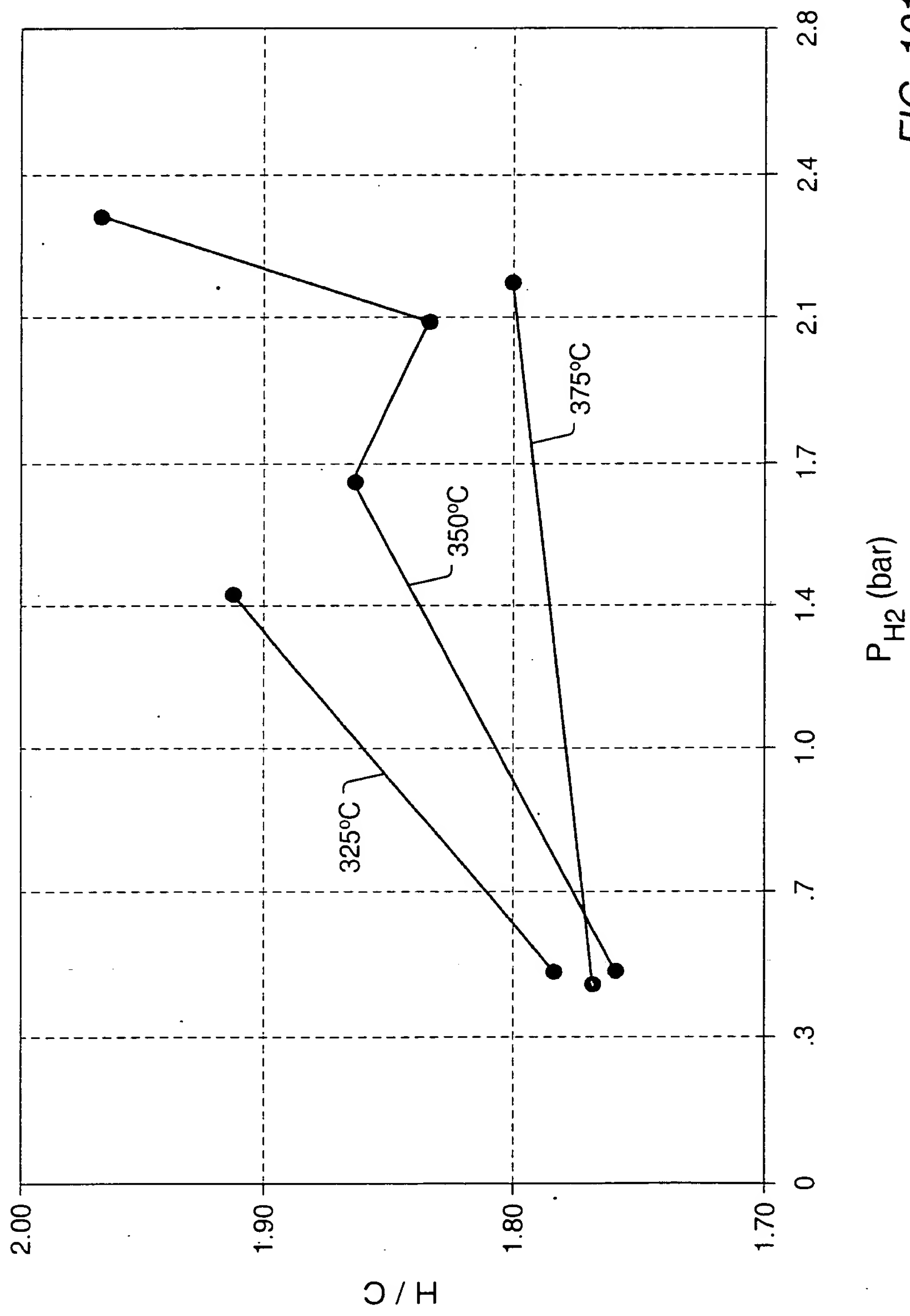
[illegible]

FIG. 101



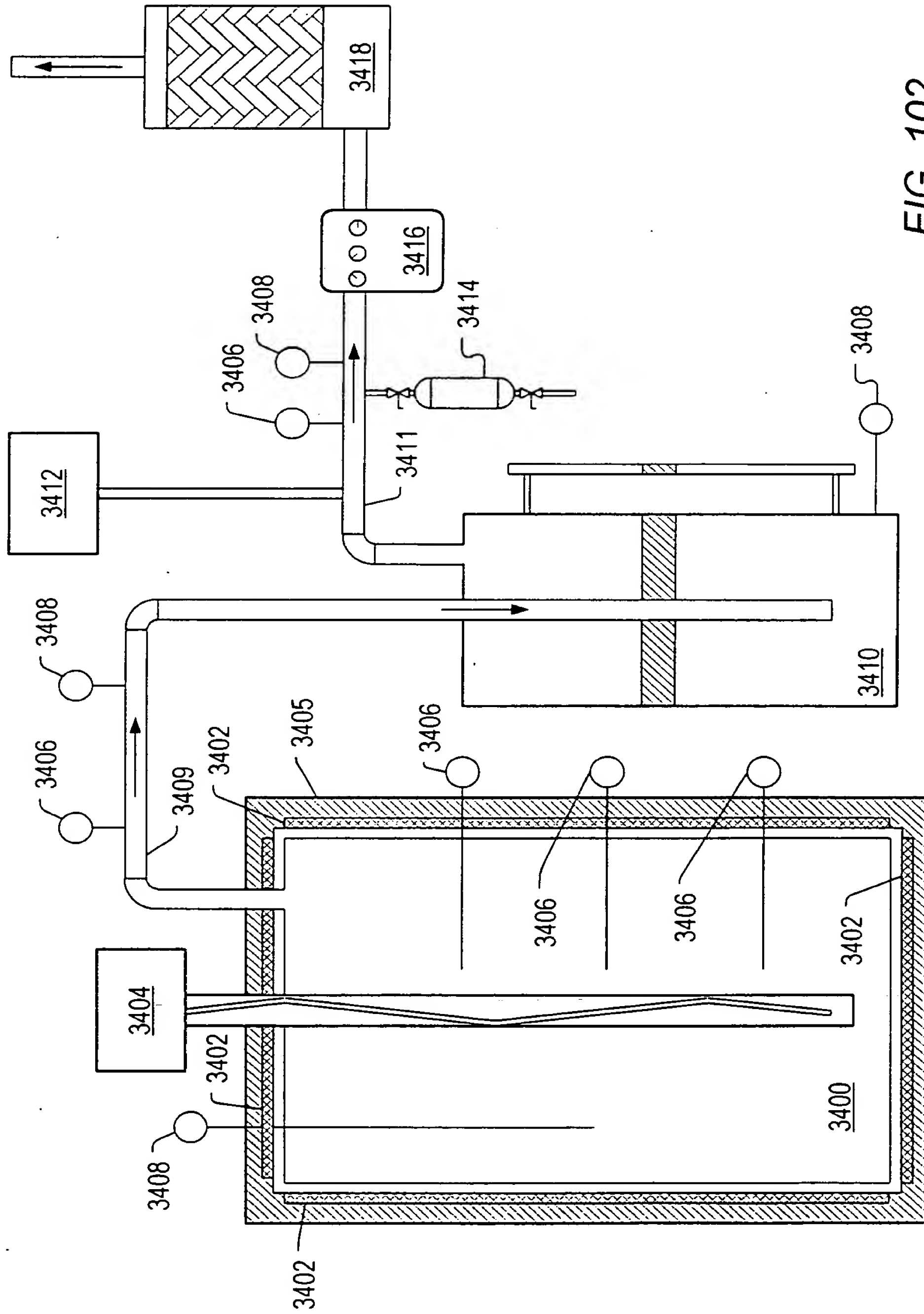
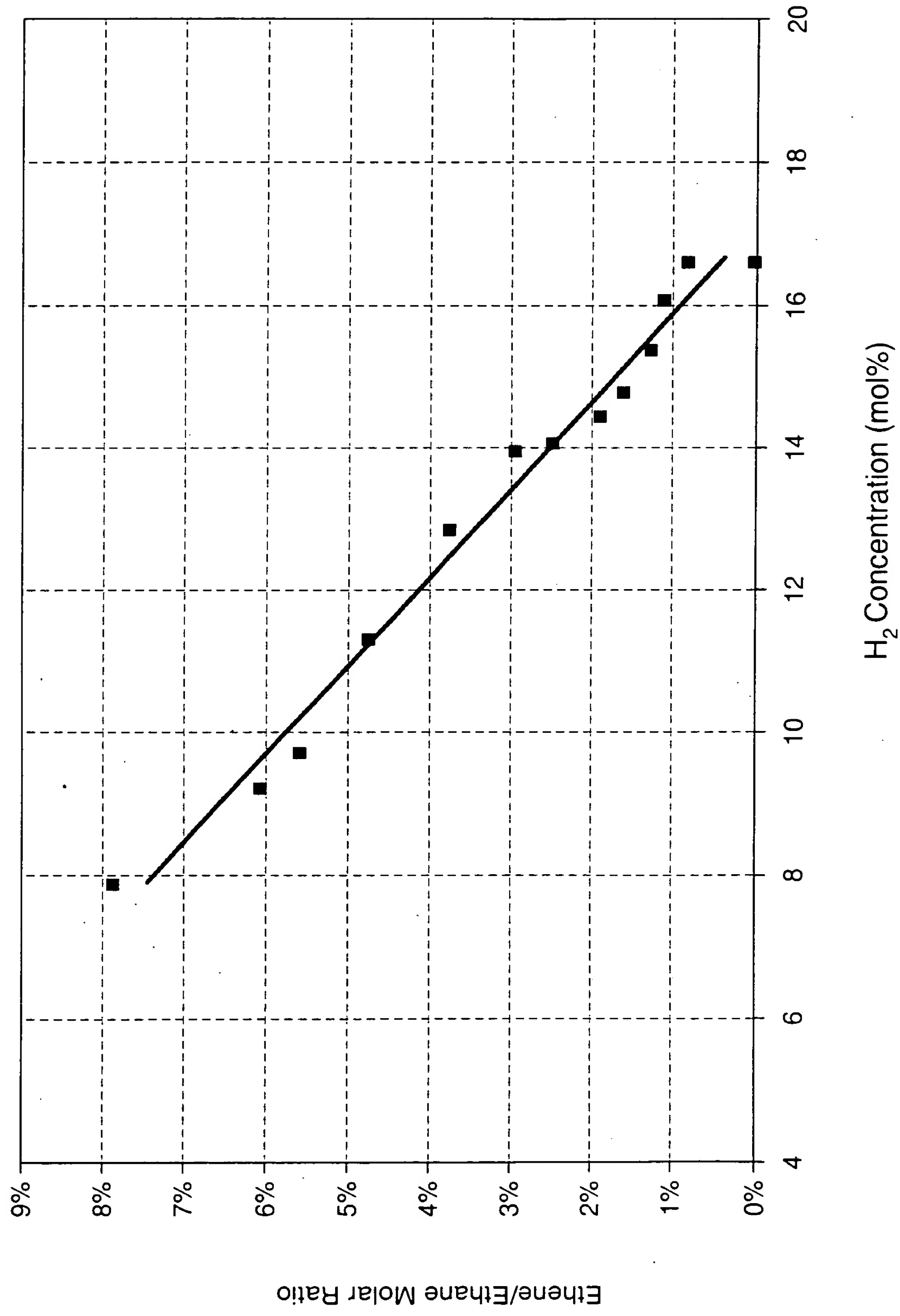


FIG. 102



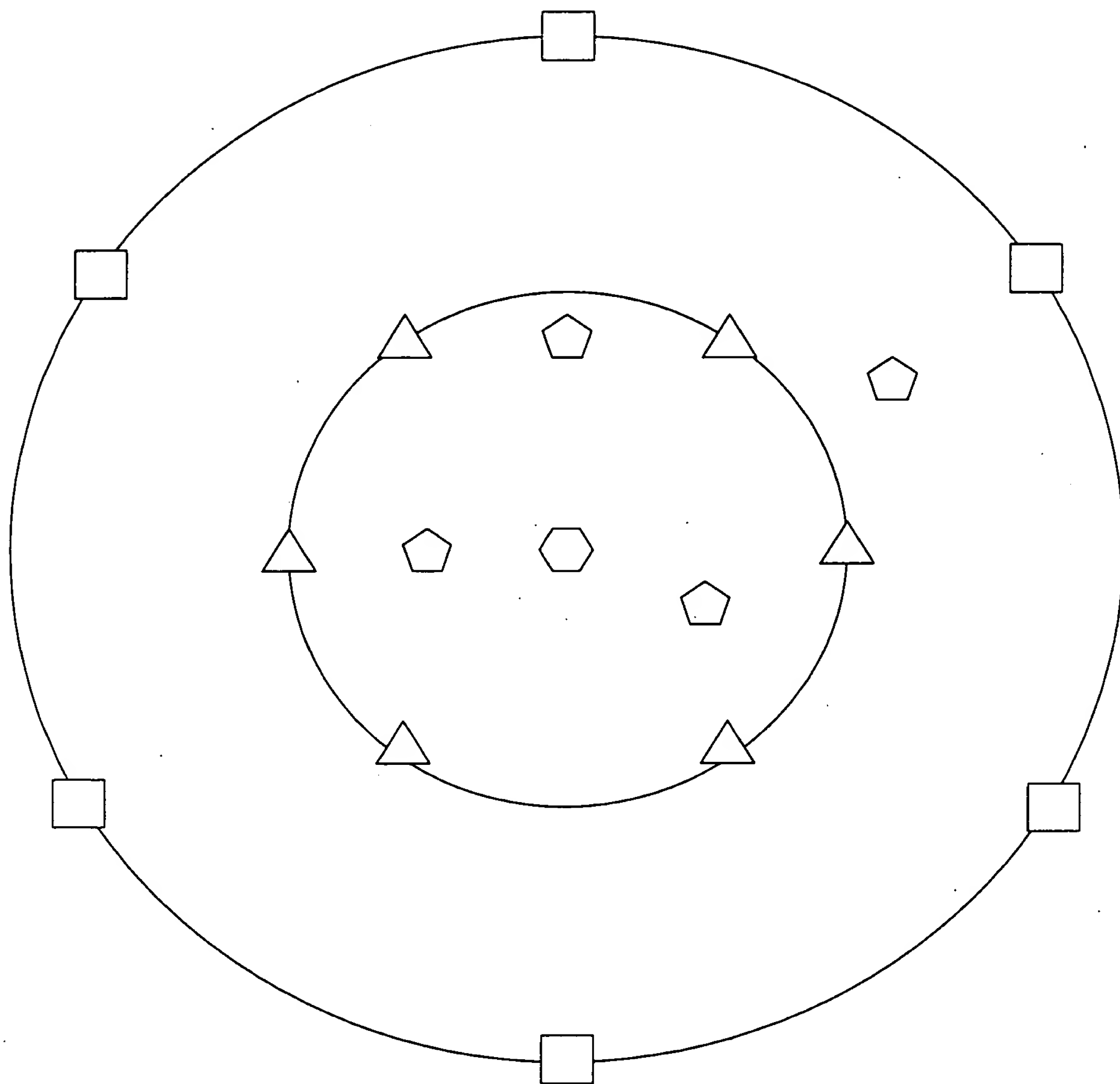
1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403</
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**FIG. 103**



FIG. 104



△ - 3600

⬠ - 3603

□ - 3604

⬡ - 3602

FIG. 104



FIG. 105

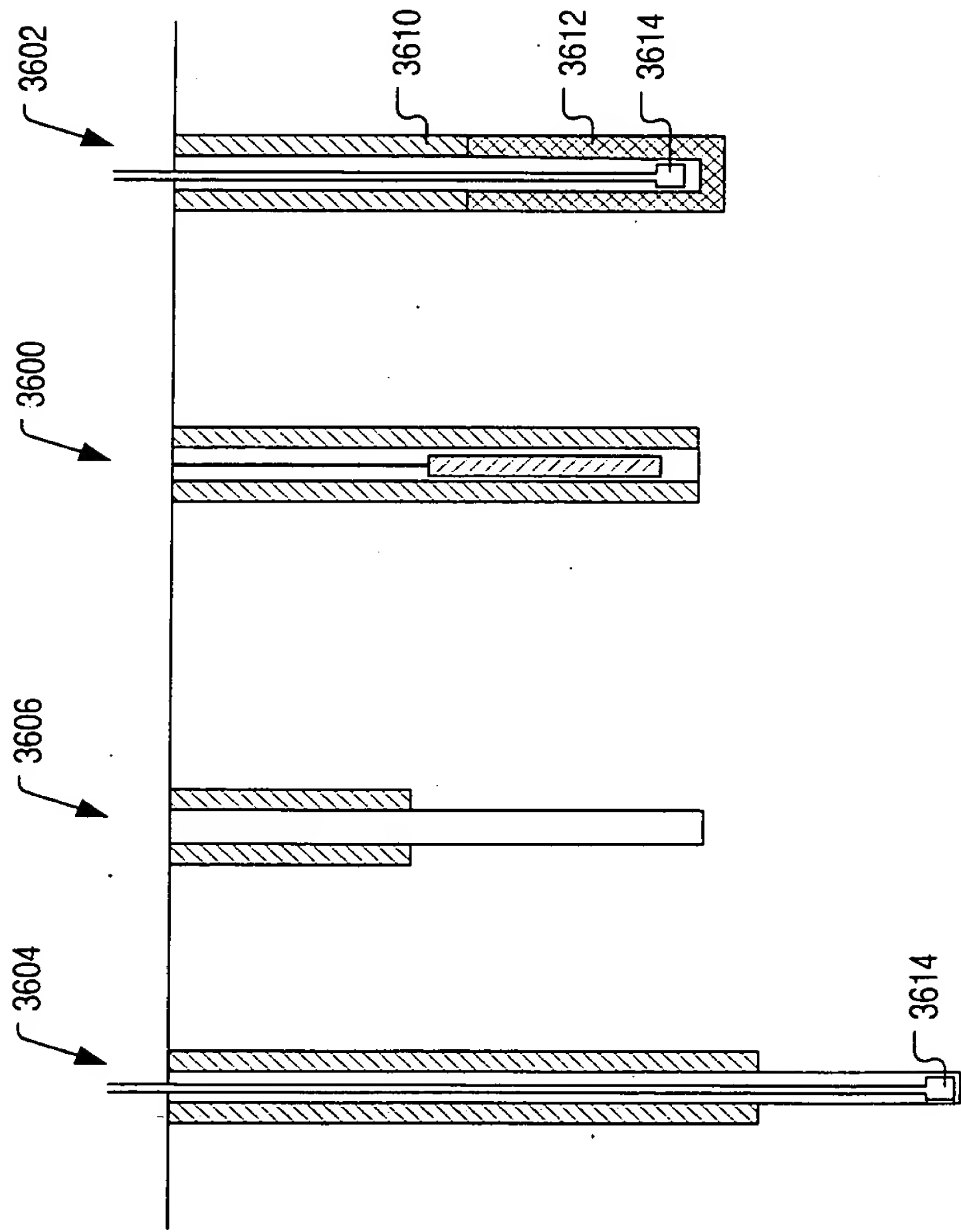
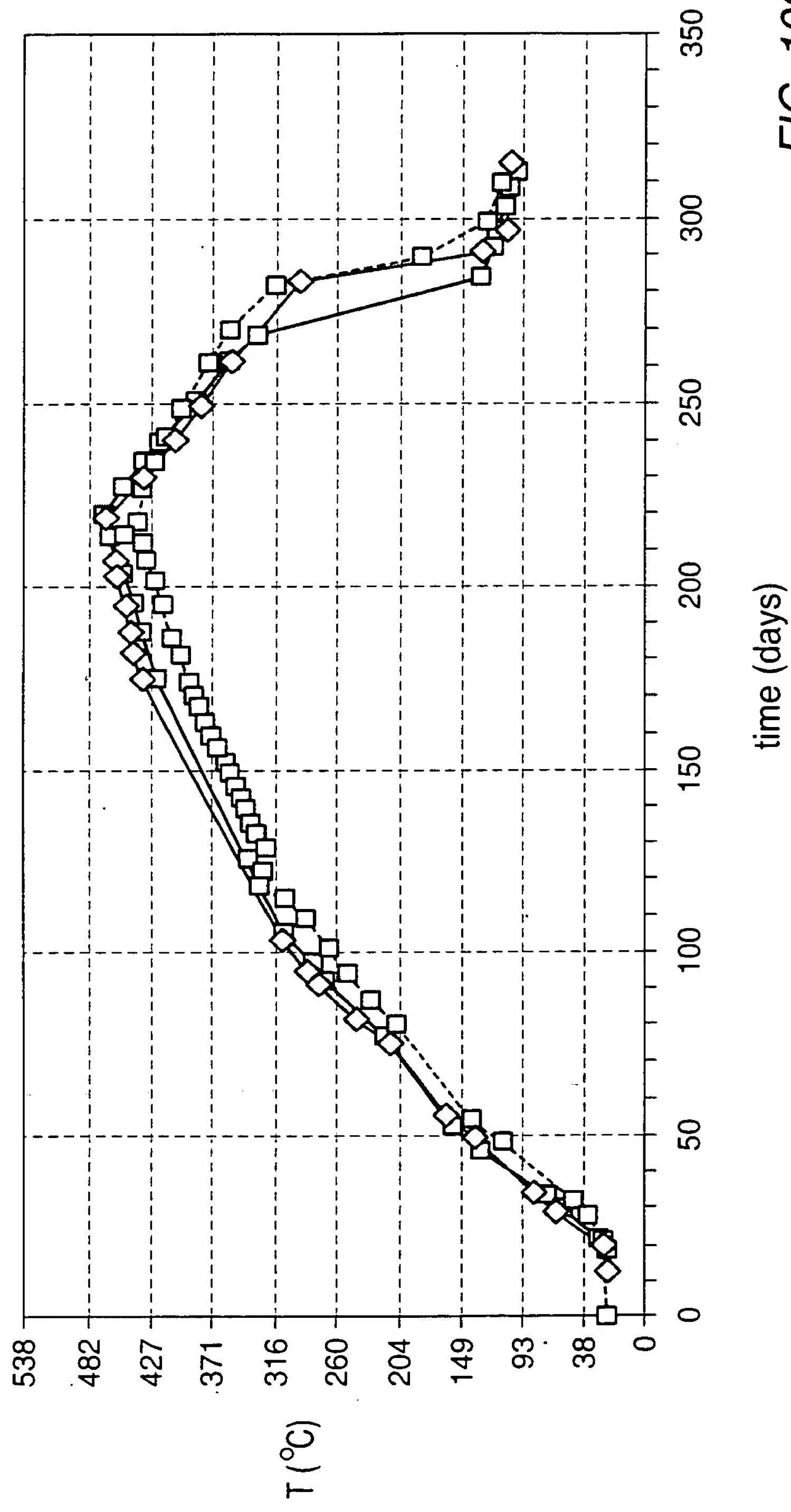


FIG. 105



1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358</
------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	--------



**FIG. 106**



11 9.7 8.3 6.9 5.5 4.1 2.8 1.4 0 -1.4

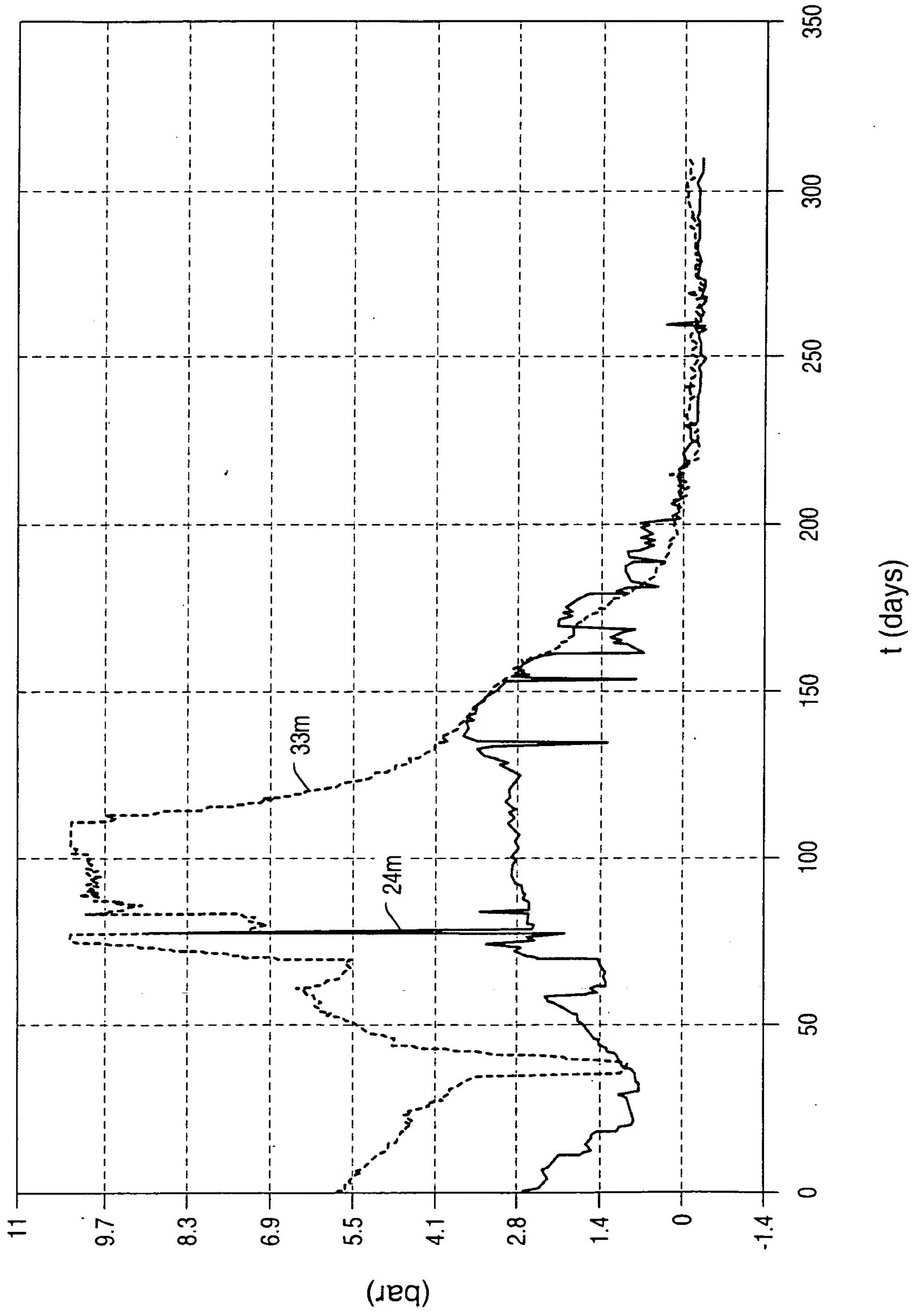


FIG. 107



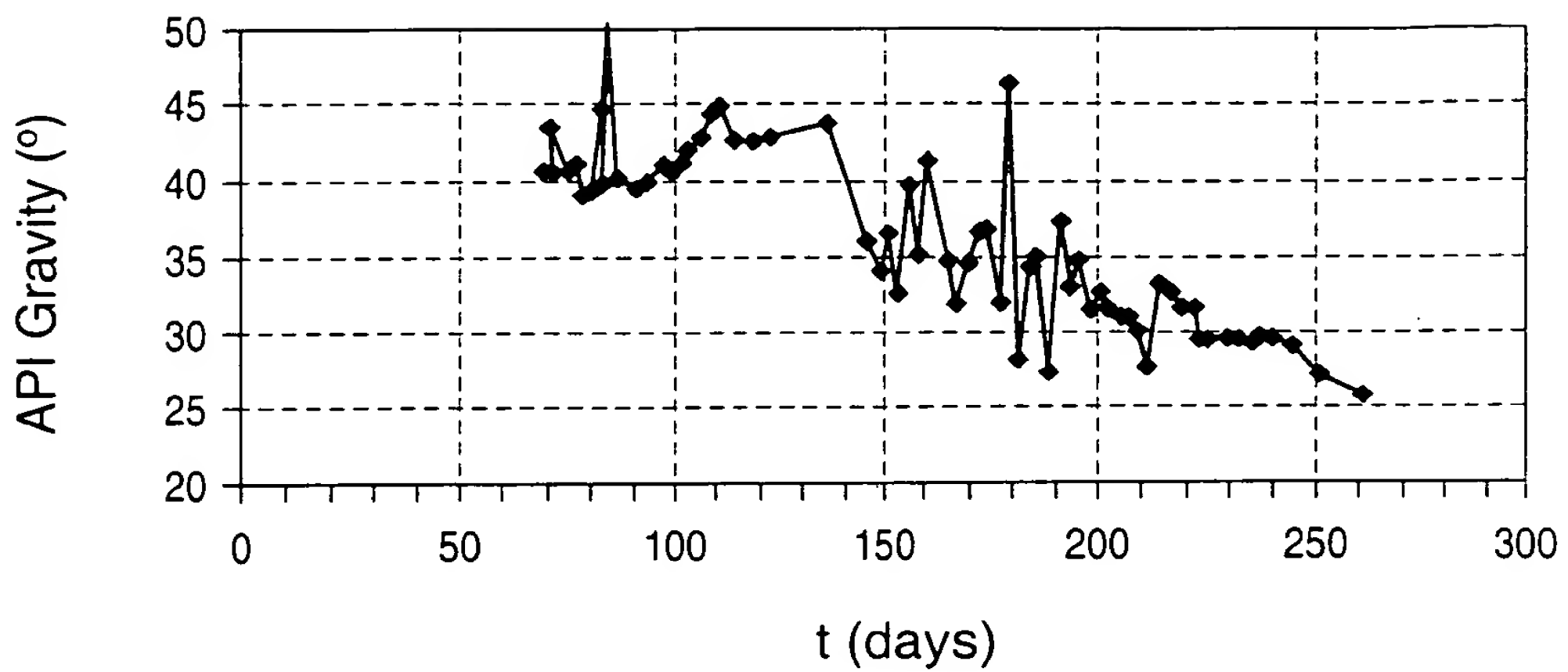


FIG. 108

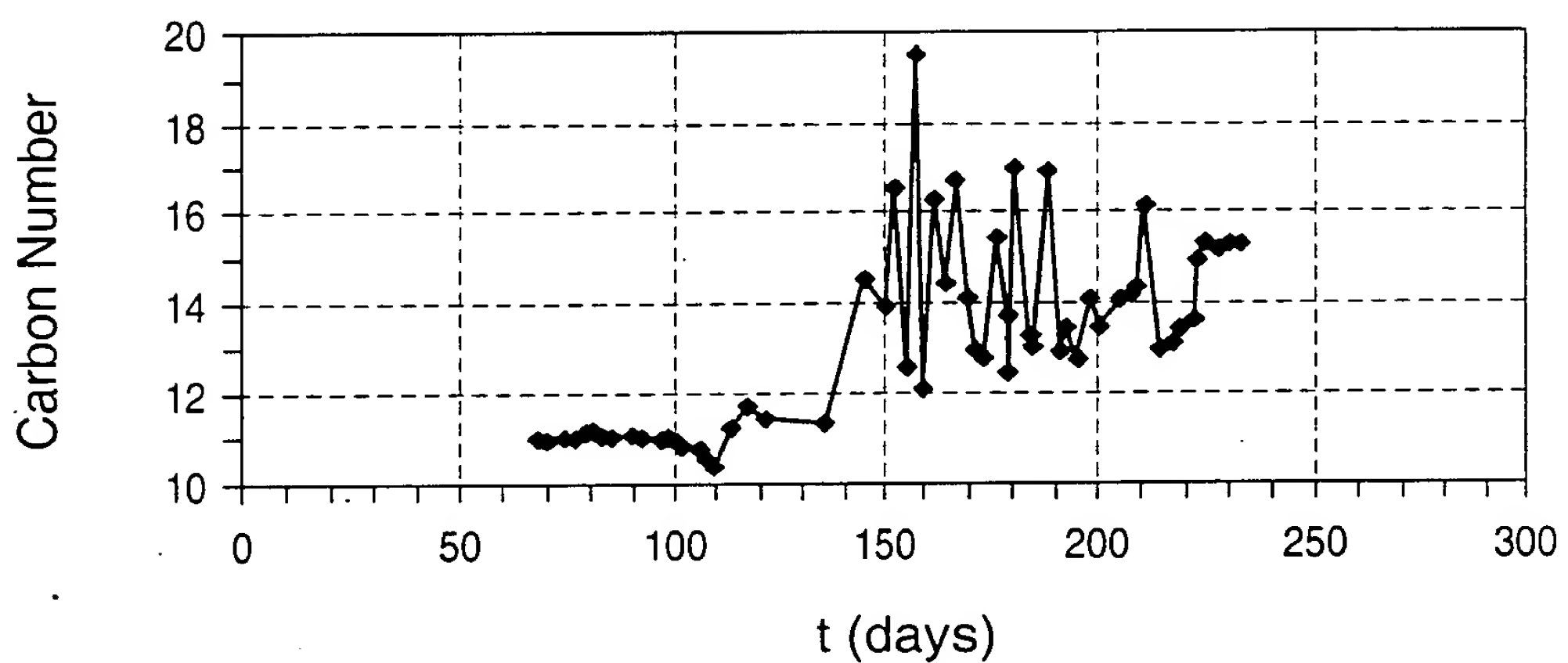


FIG. 109

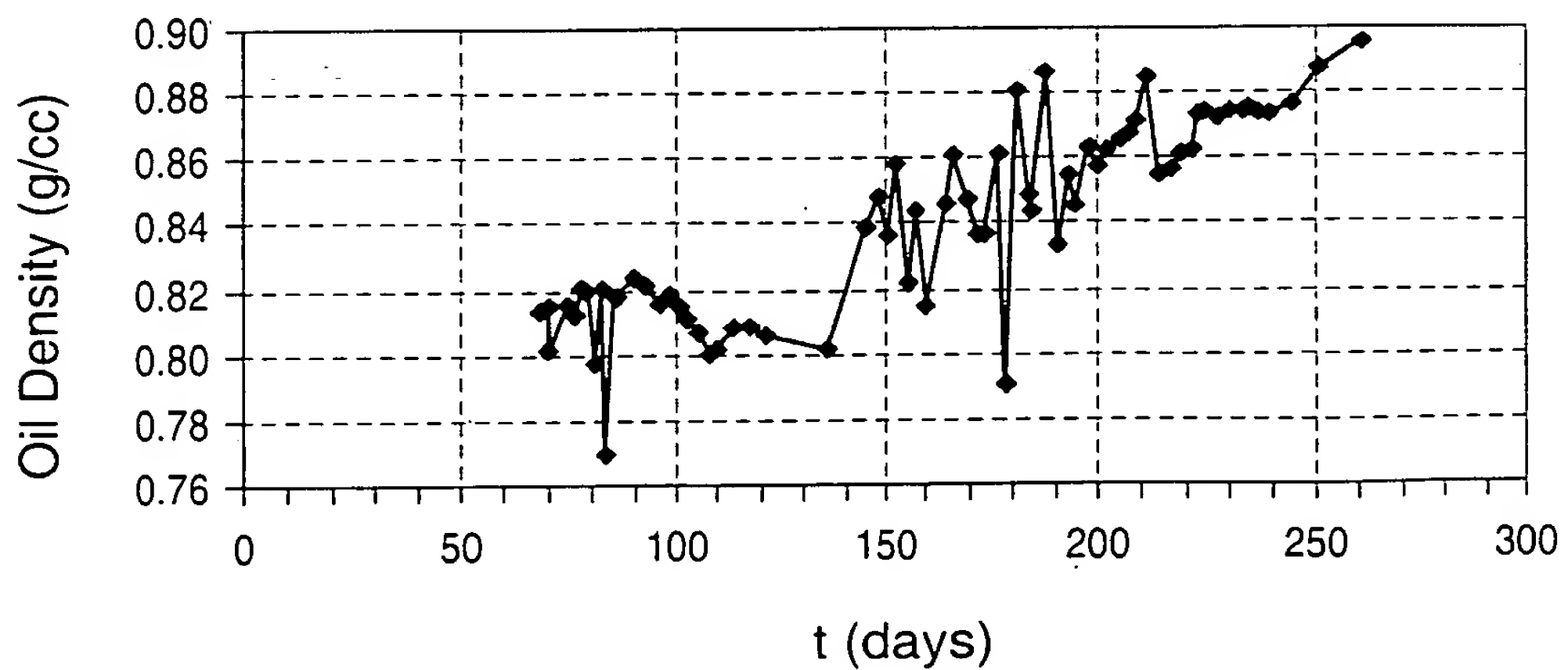


FIG. 110







*(The following names are those appearing in the original manuscript.)*

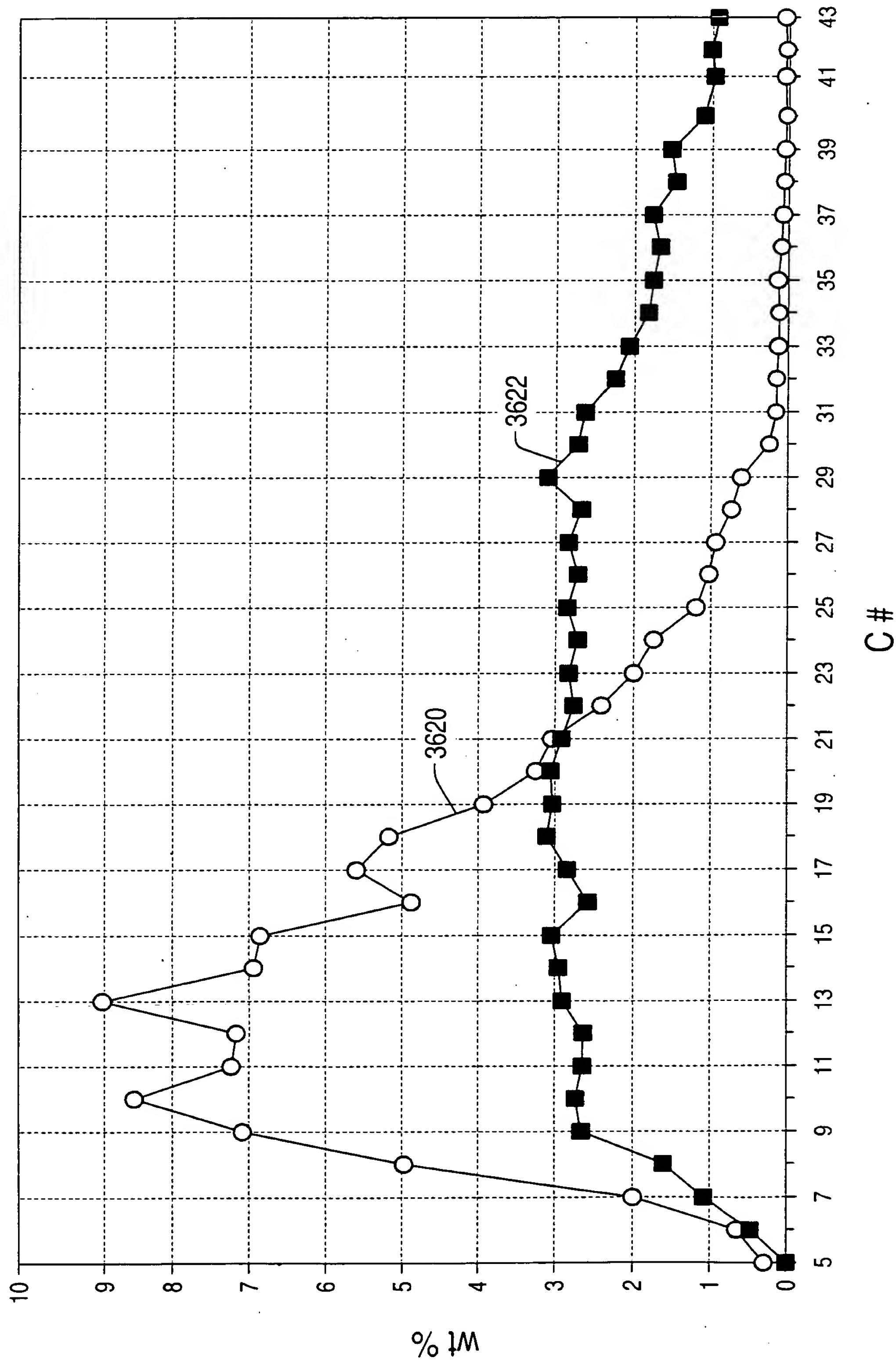


FIG. 112



U.S. PAT. 4,453,453

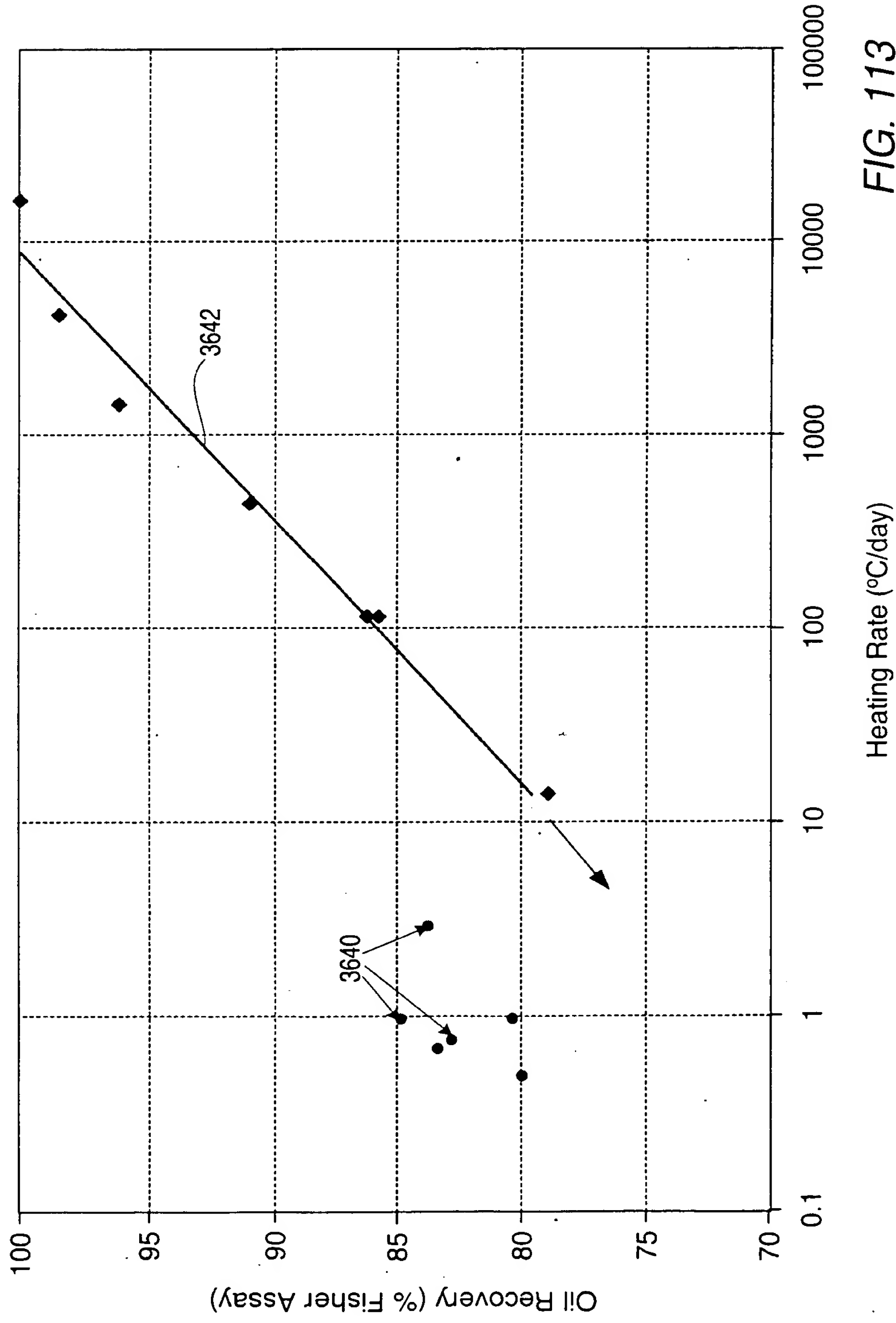


FIG. 113



FIG. 114

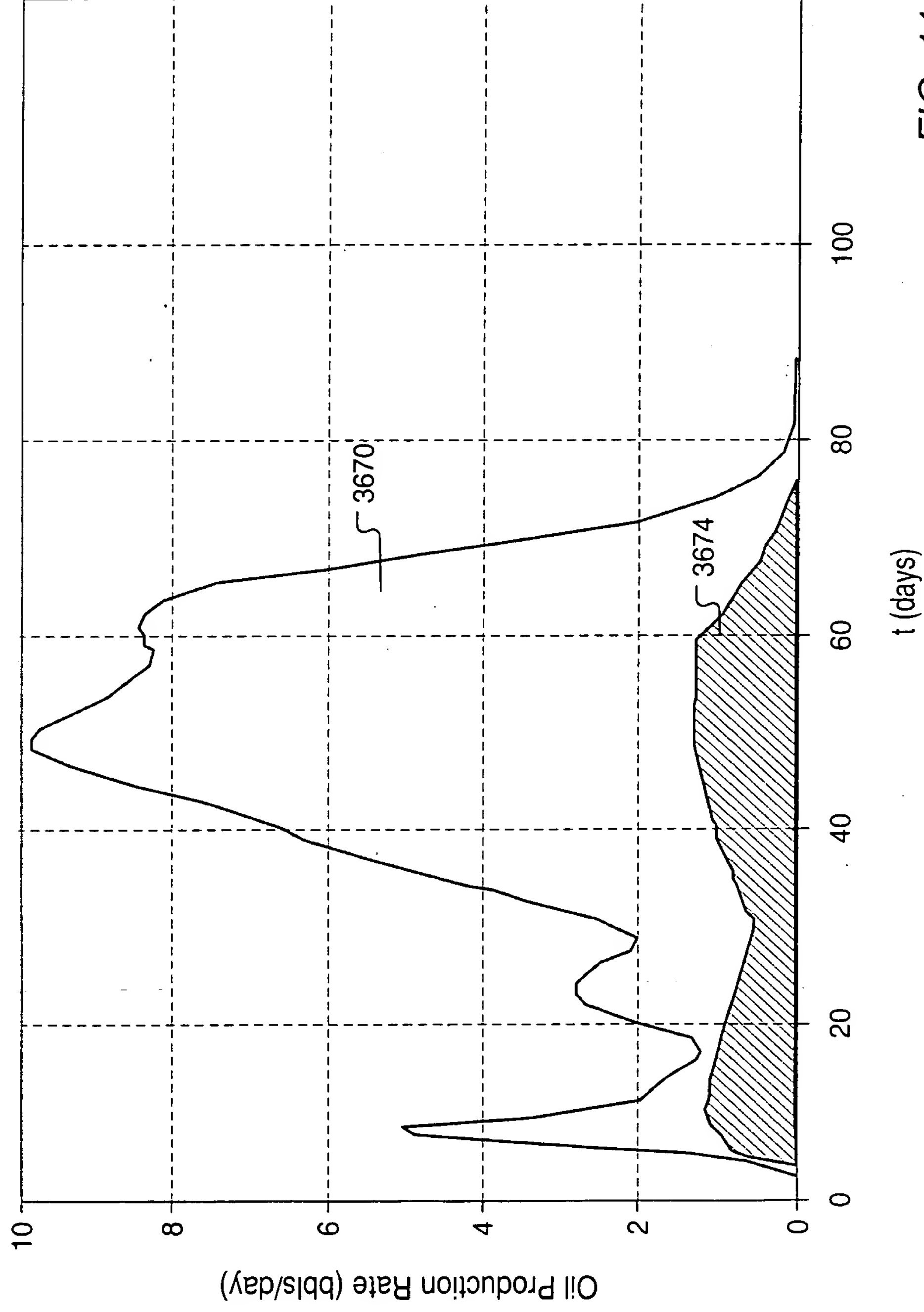
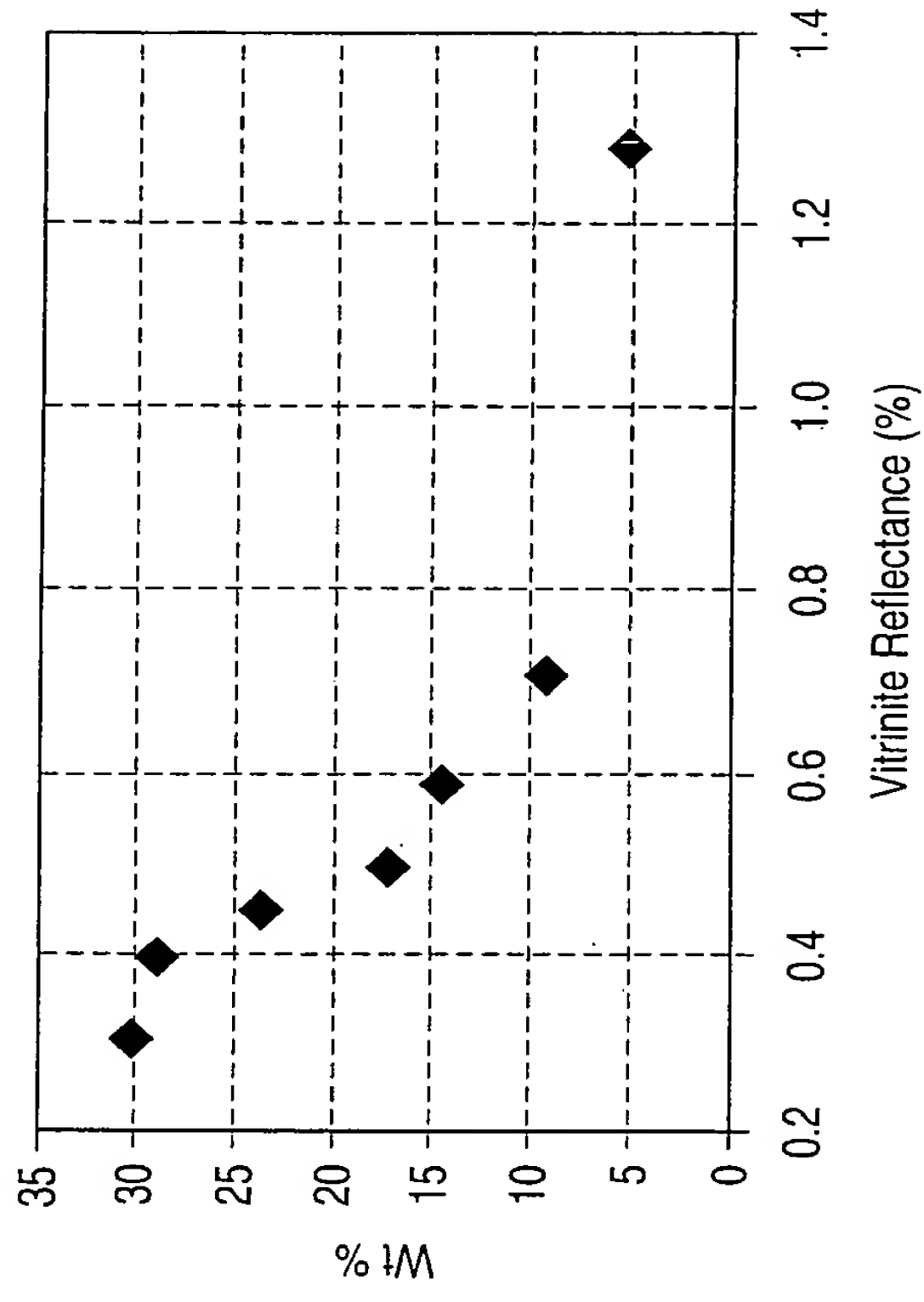
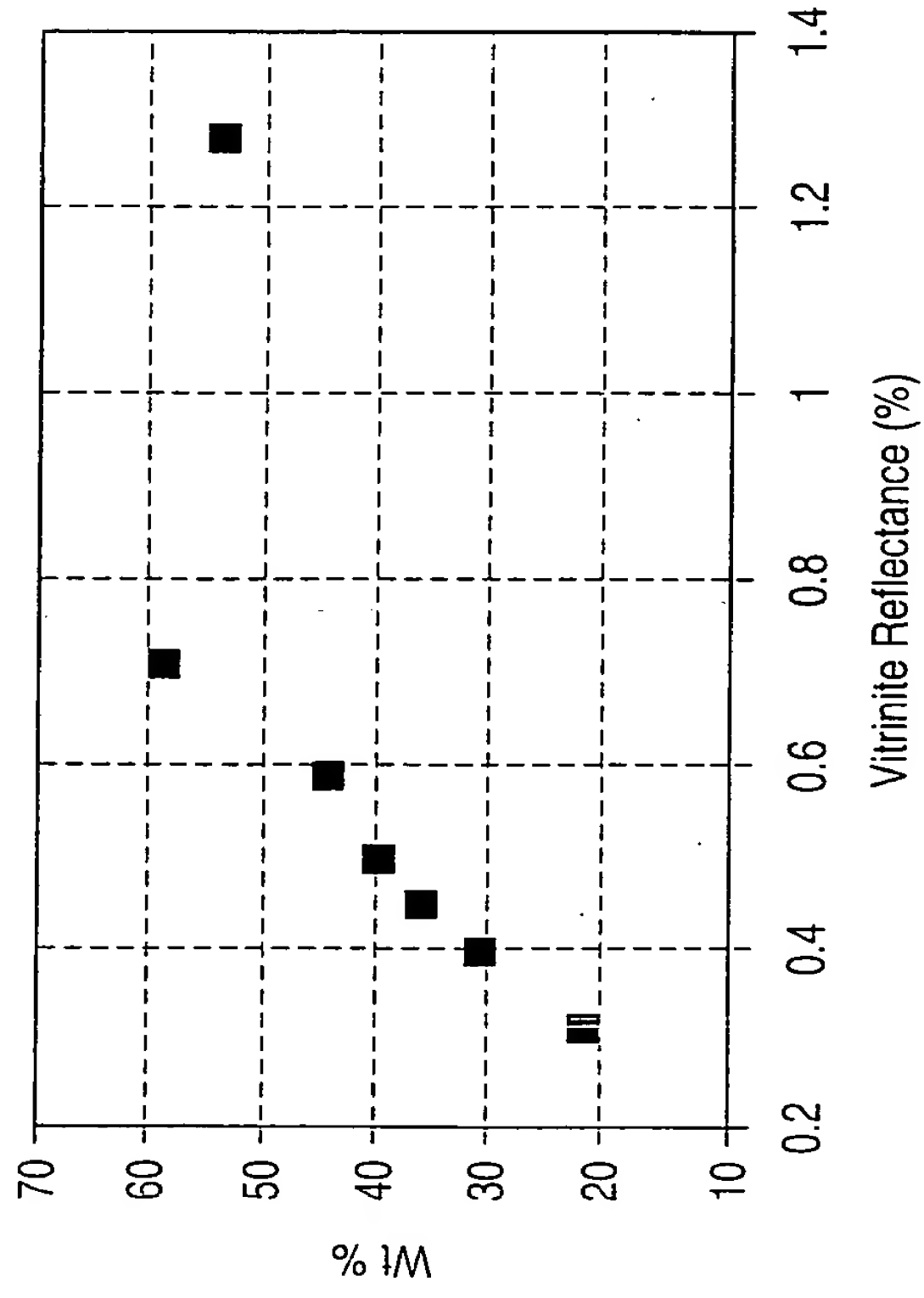
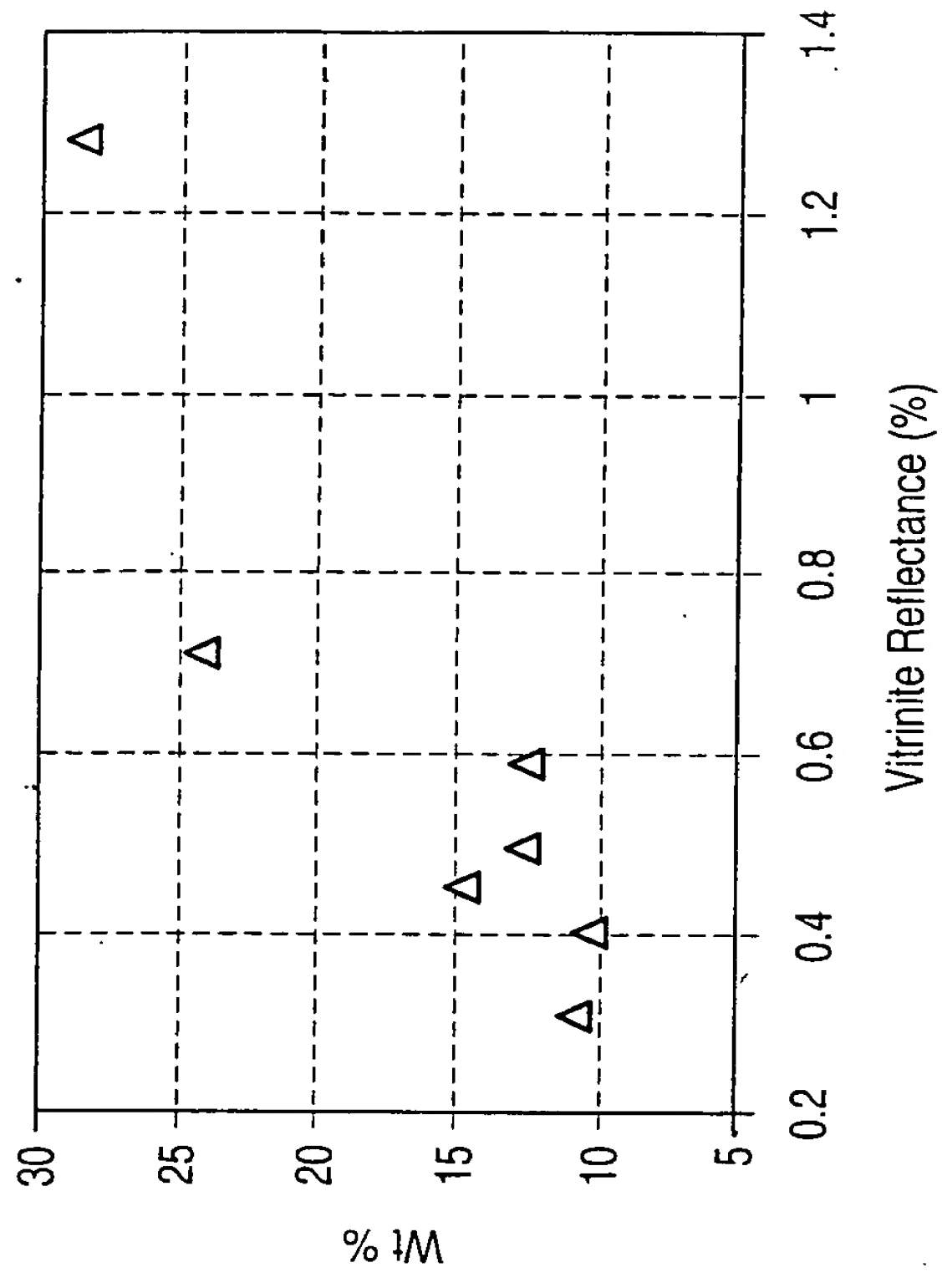
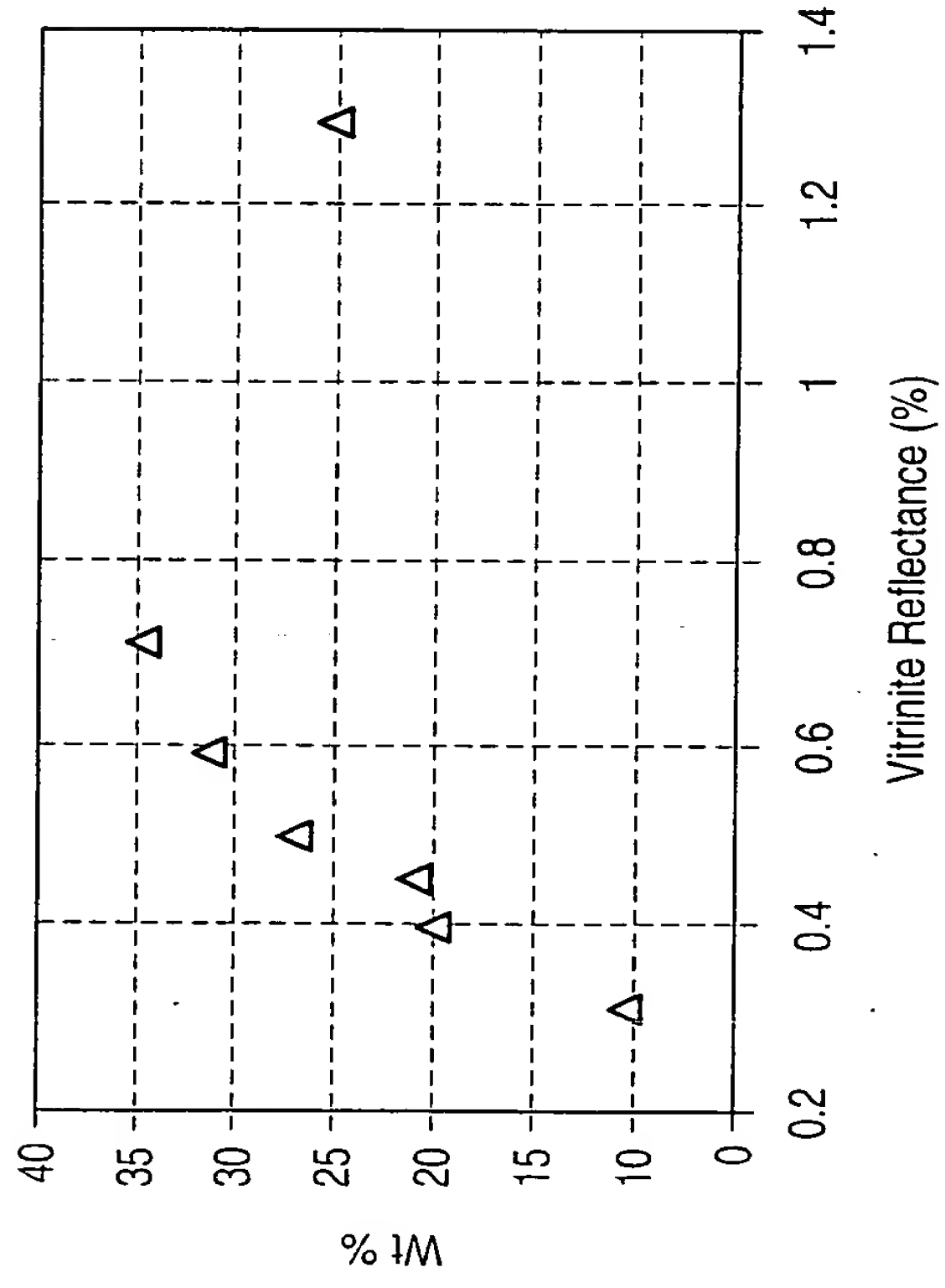


FIG. 114







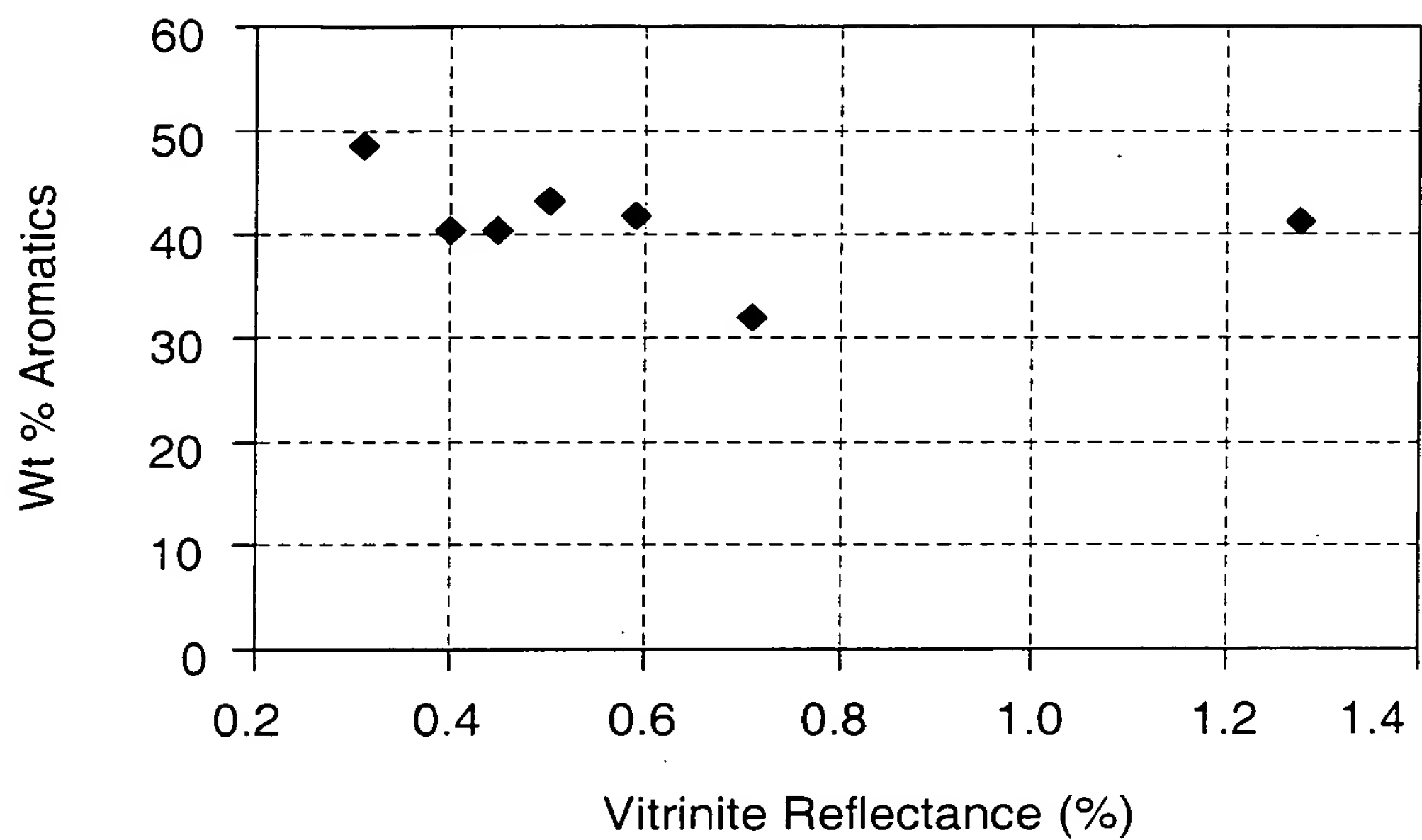


FIG. 119

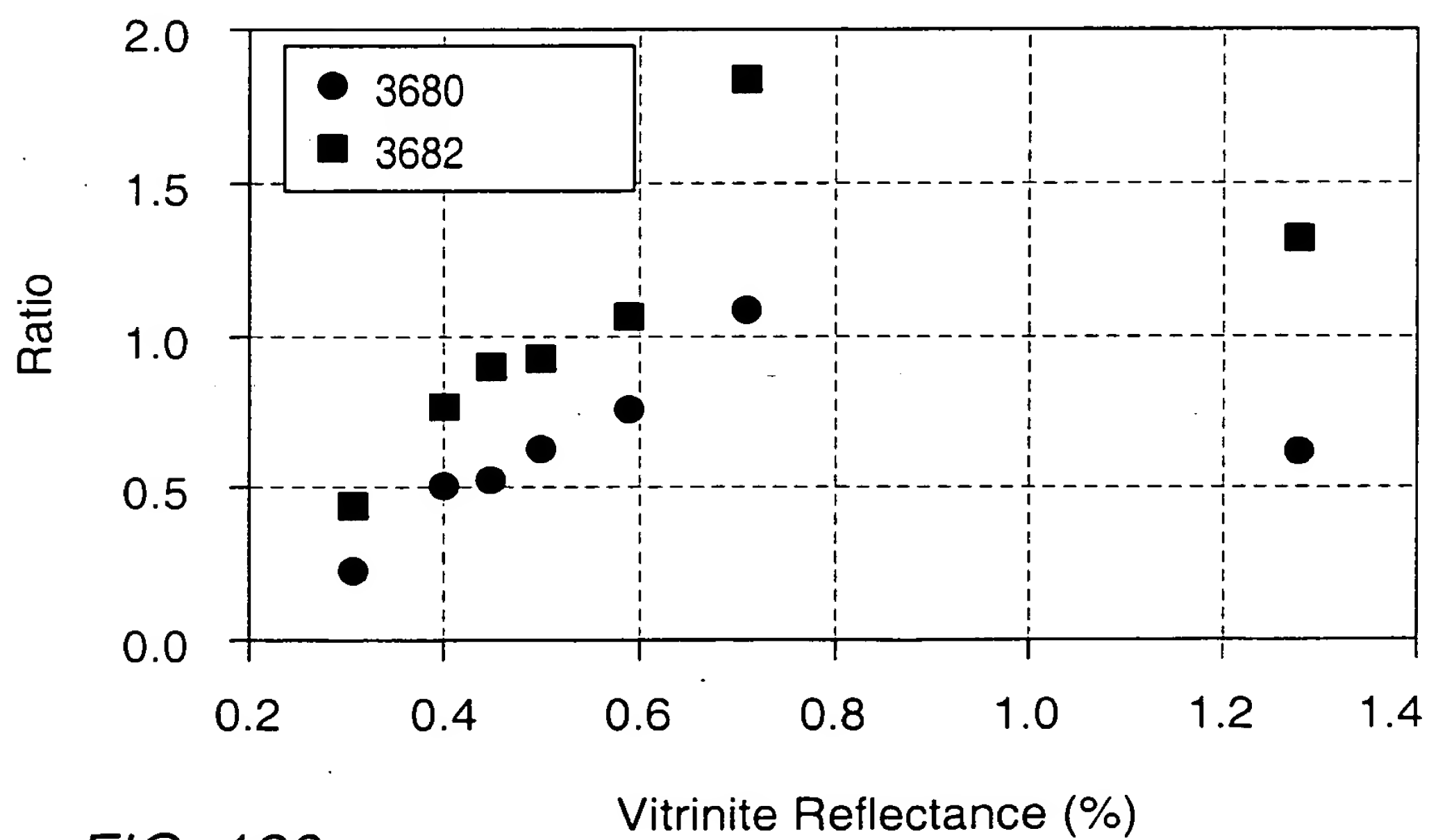


FIG. 120



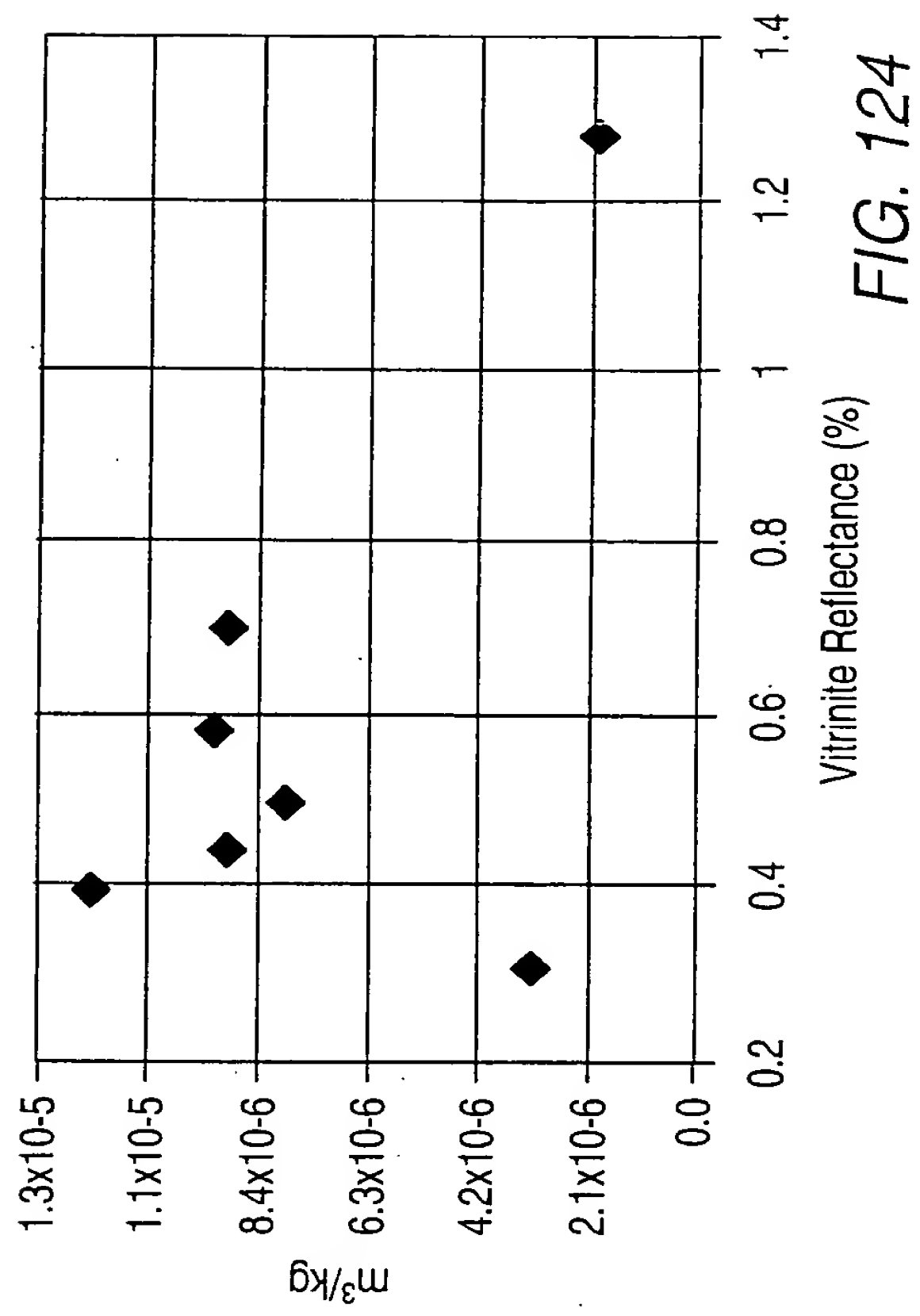
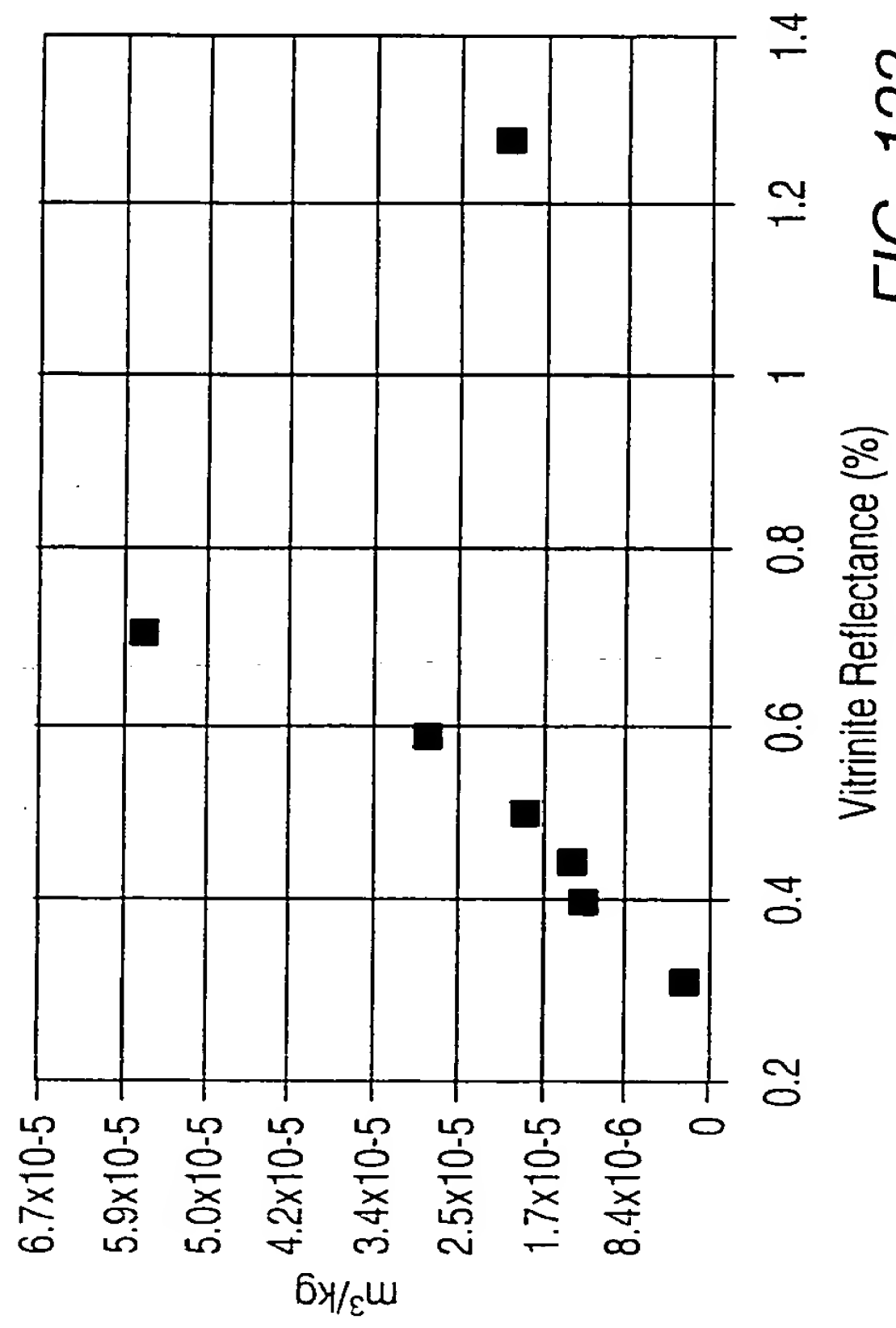
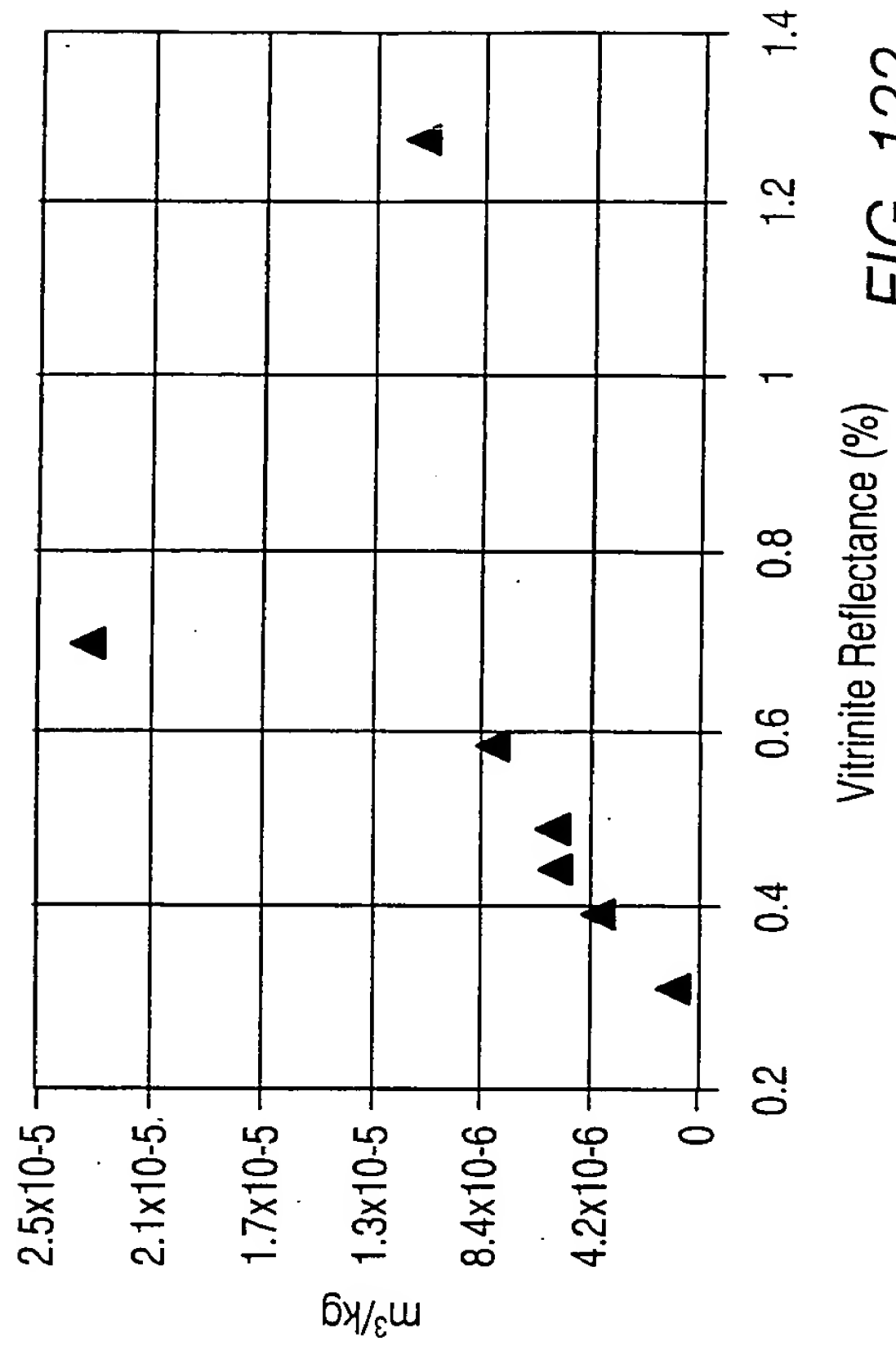
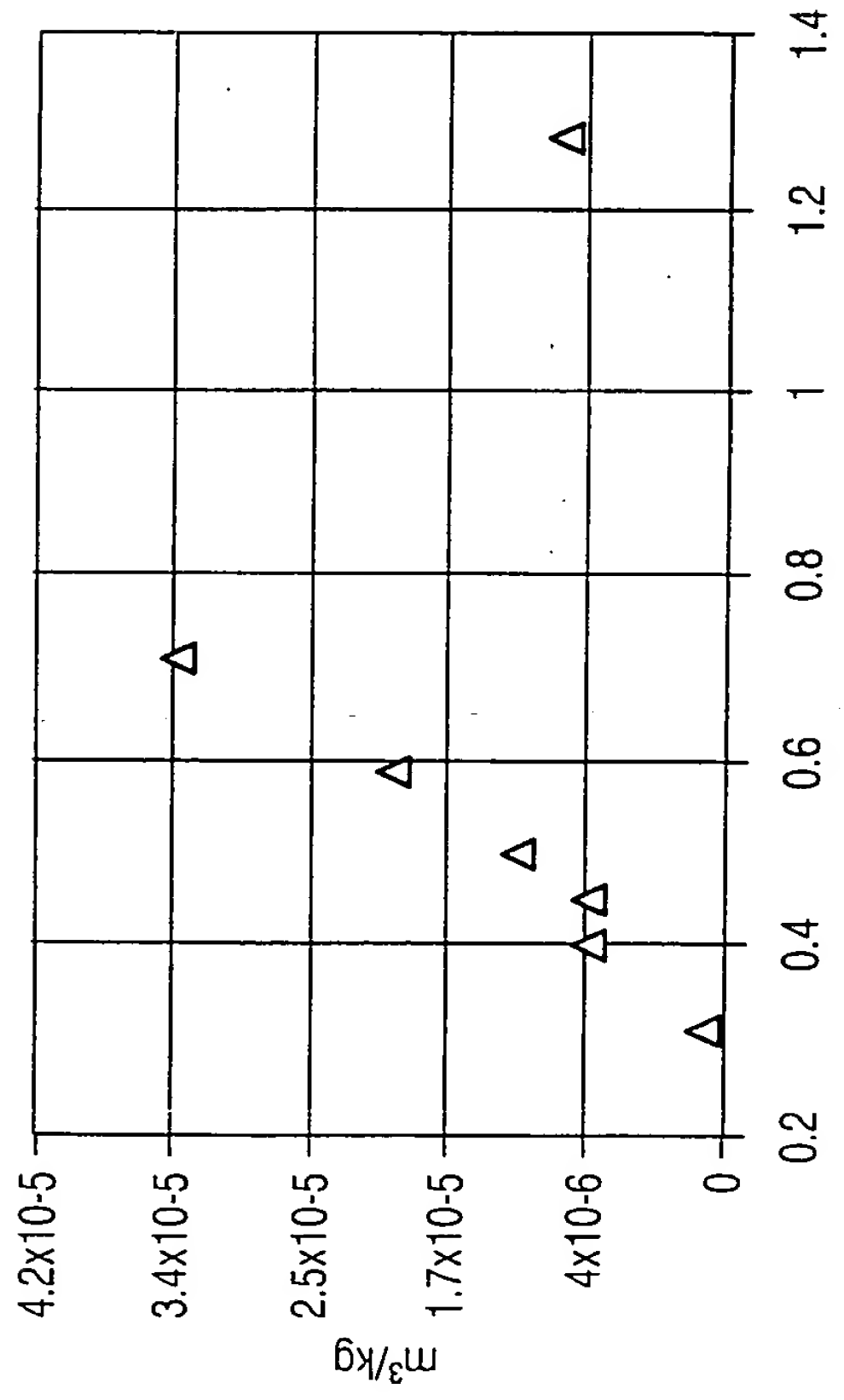
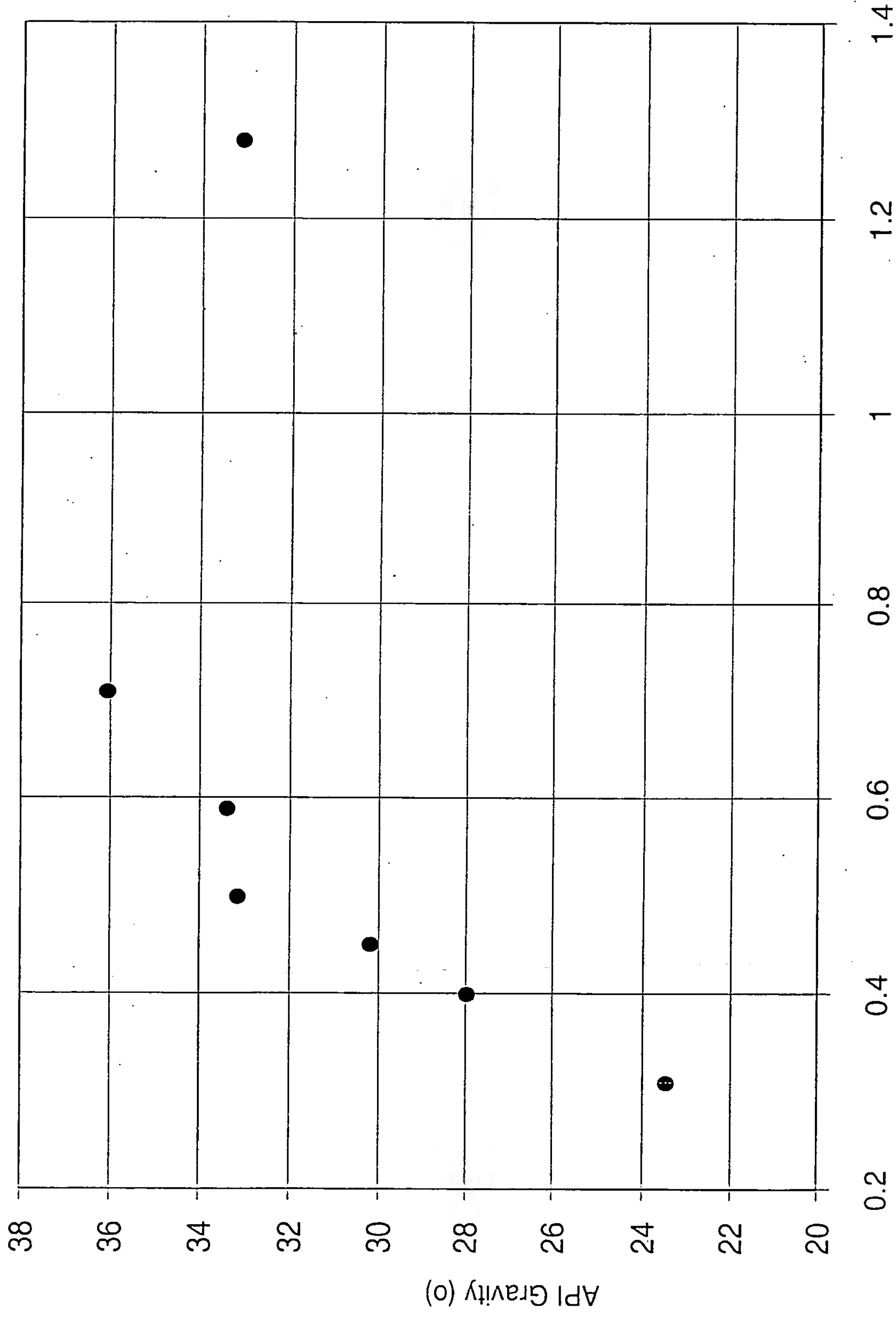




Figure 125 is a scatter plot showing the relationship between API Gravity (°) and Vitritinite Reflectance (%). The Y-axis represents API Gravity (°) ranging from 20 to 38. The X-axis represents Vitritinite Reflectance (%) ranging from 0.2 to 1.4. The data points are plotted as follows:

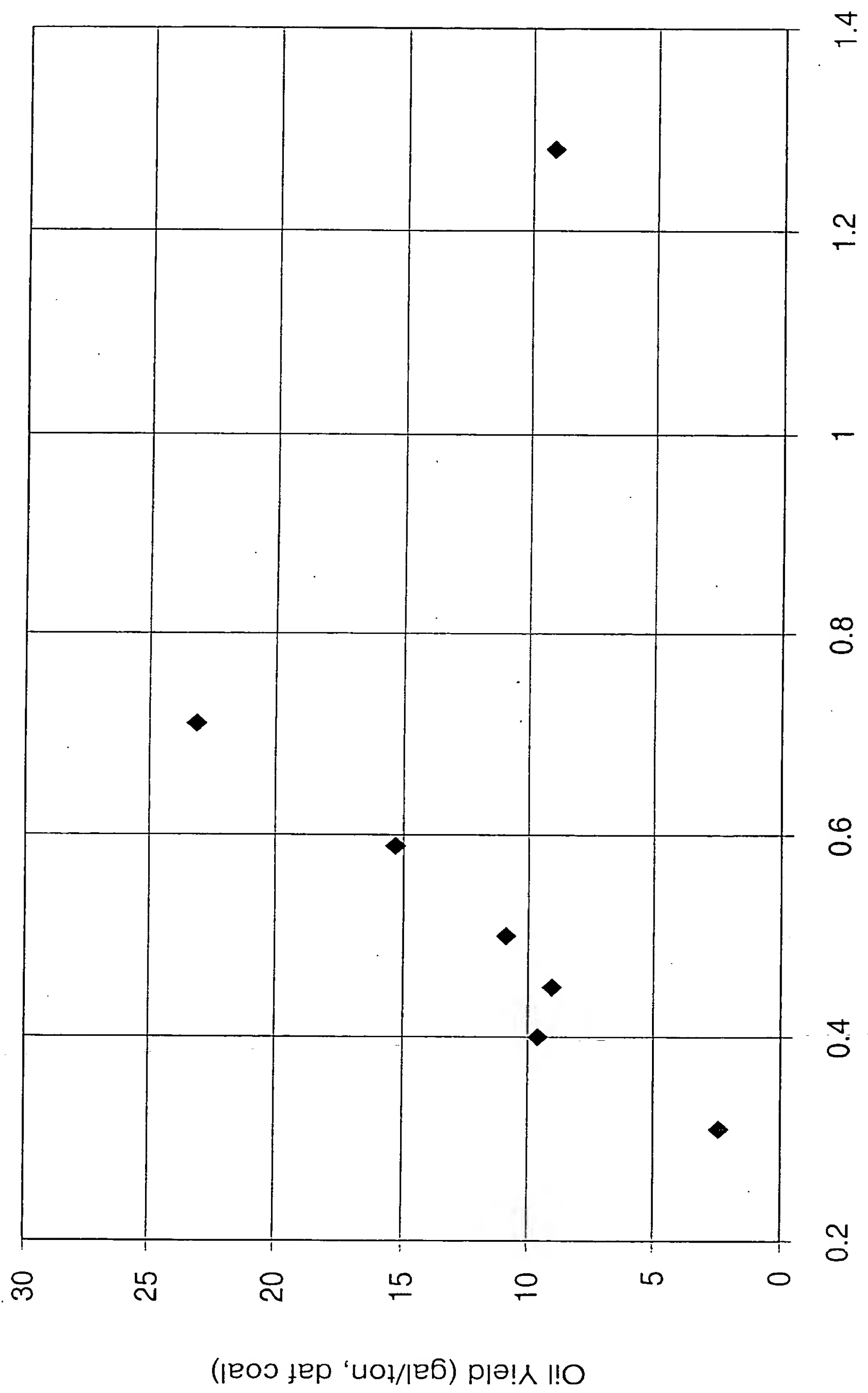


Vitritinite Reflectance (%)

FIG. 125



Figure 126 is a scatter plot showing the relationship between Oil Yield (gal/ton, daf coal) on the Y-axis and Vitrinite Reflectance (%) on the X-axis. The Y-axis ranges from 0 to 30 in increments of 5. The X-axis ranges from 0.2 to 1.4 in increments of 0.2. There are 8 data points plotted as solid diamonds.



Vitrinite Reflectance (%)

FIG. 126



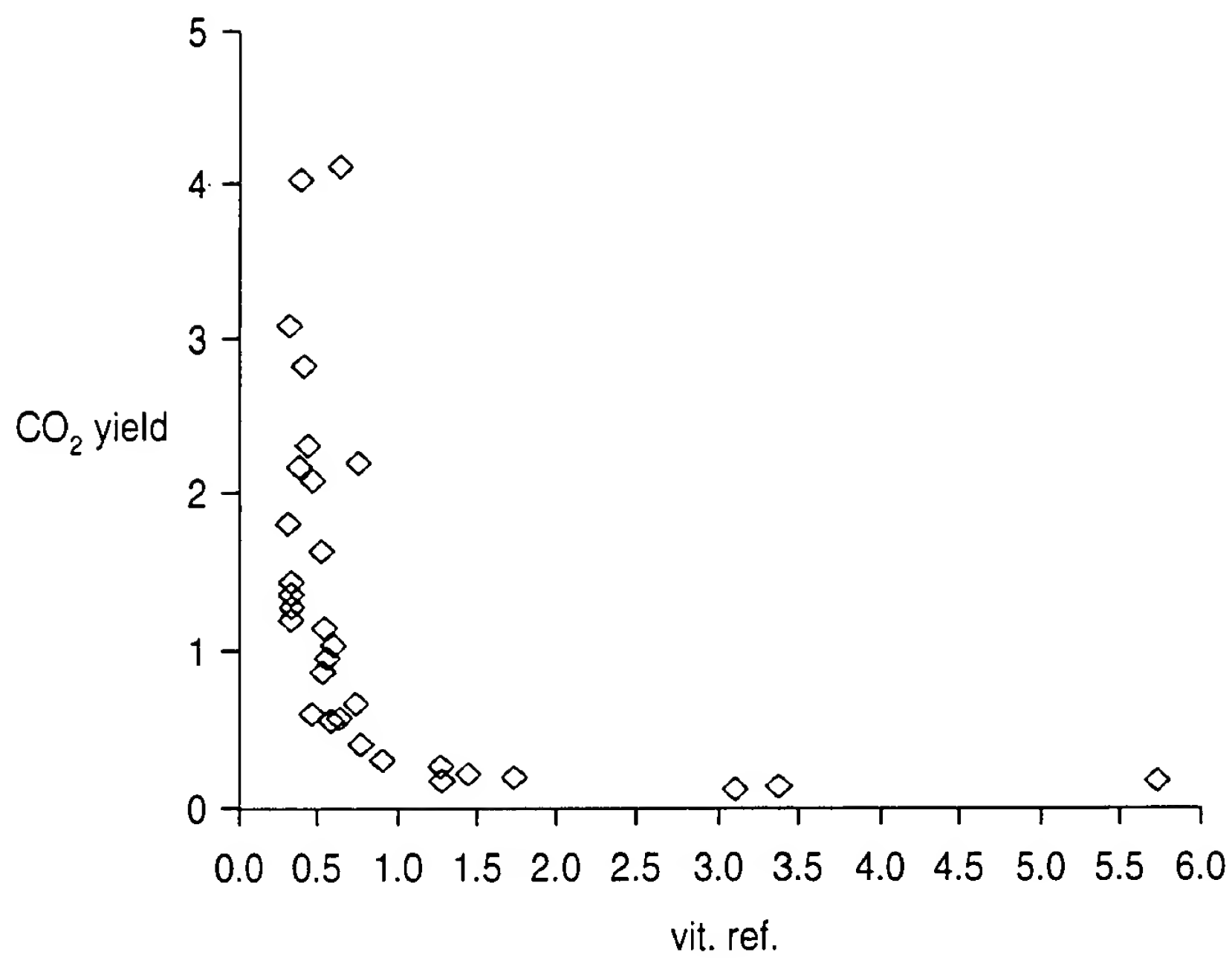


FIG. 127

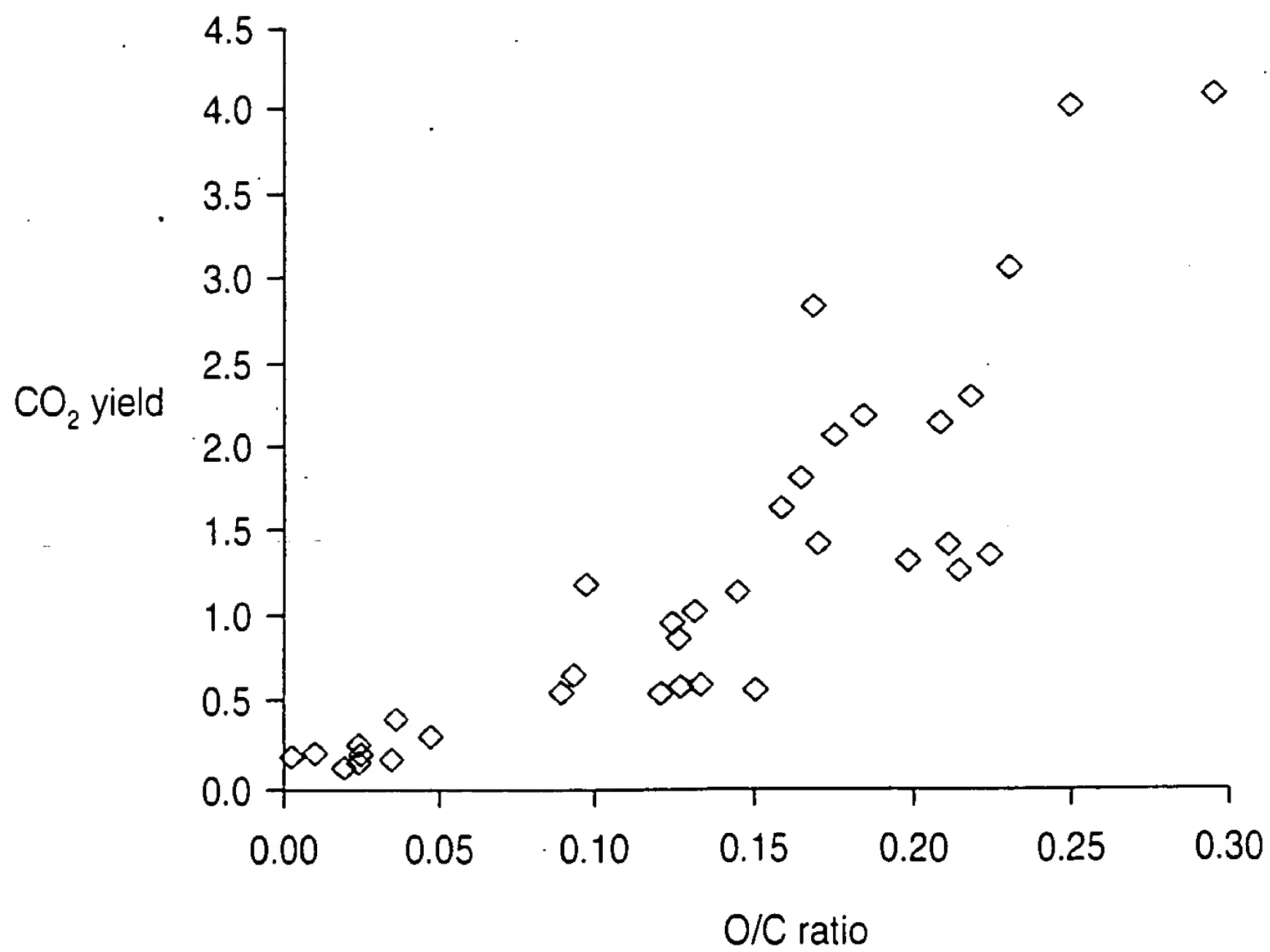


FIG. 128



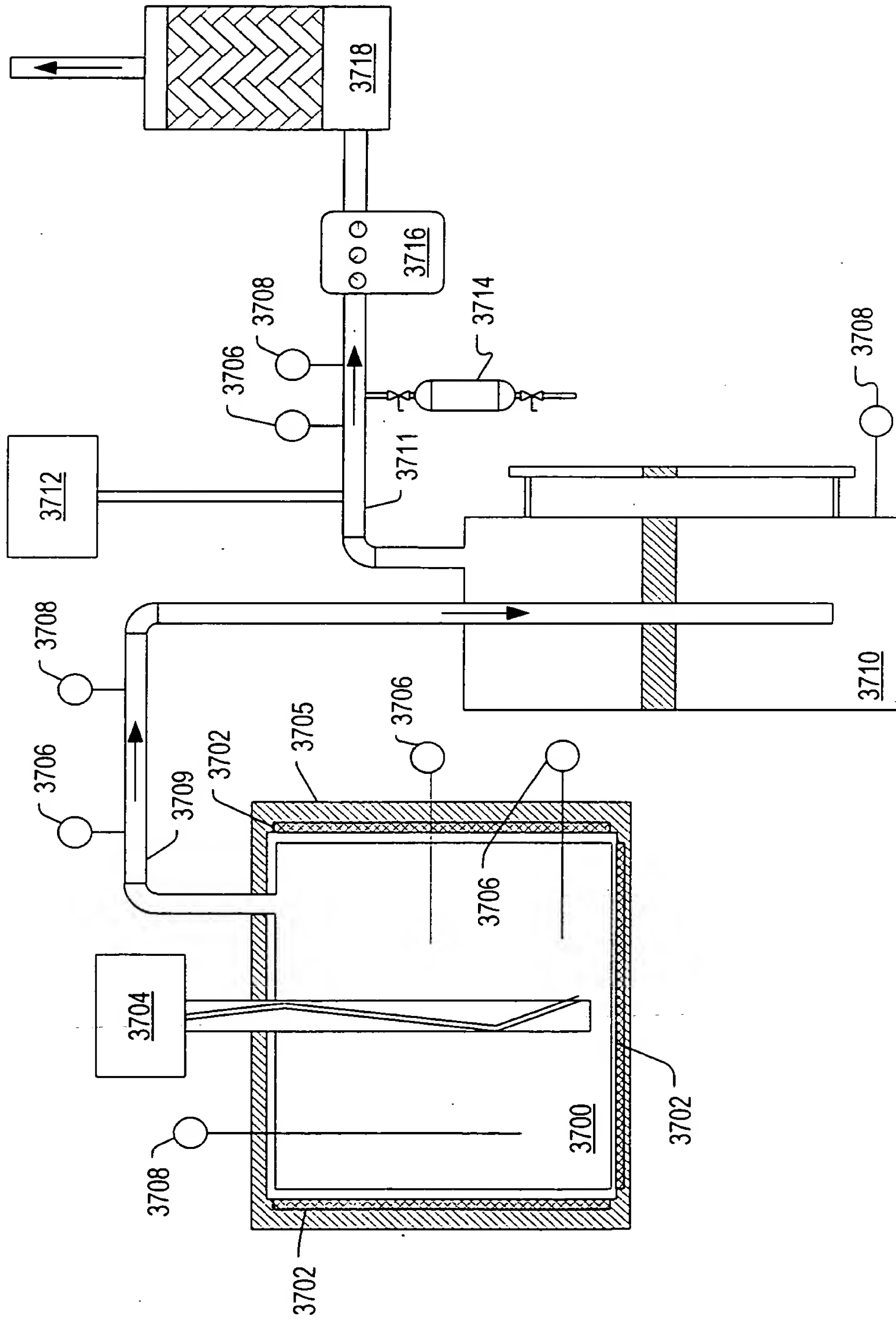


FIG. 129



70440 0647400

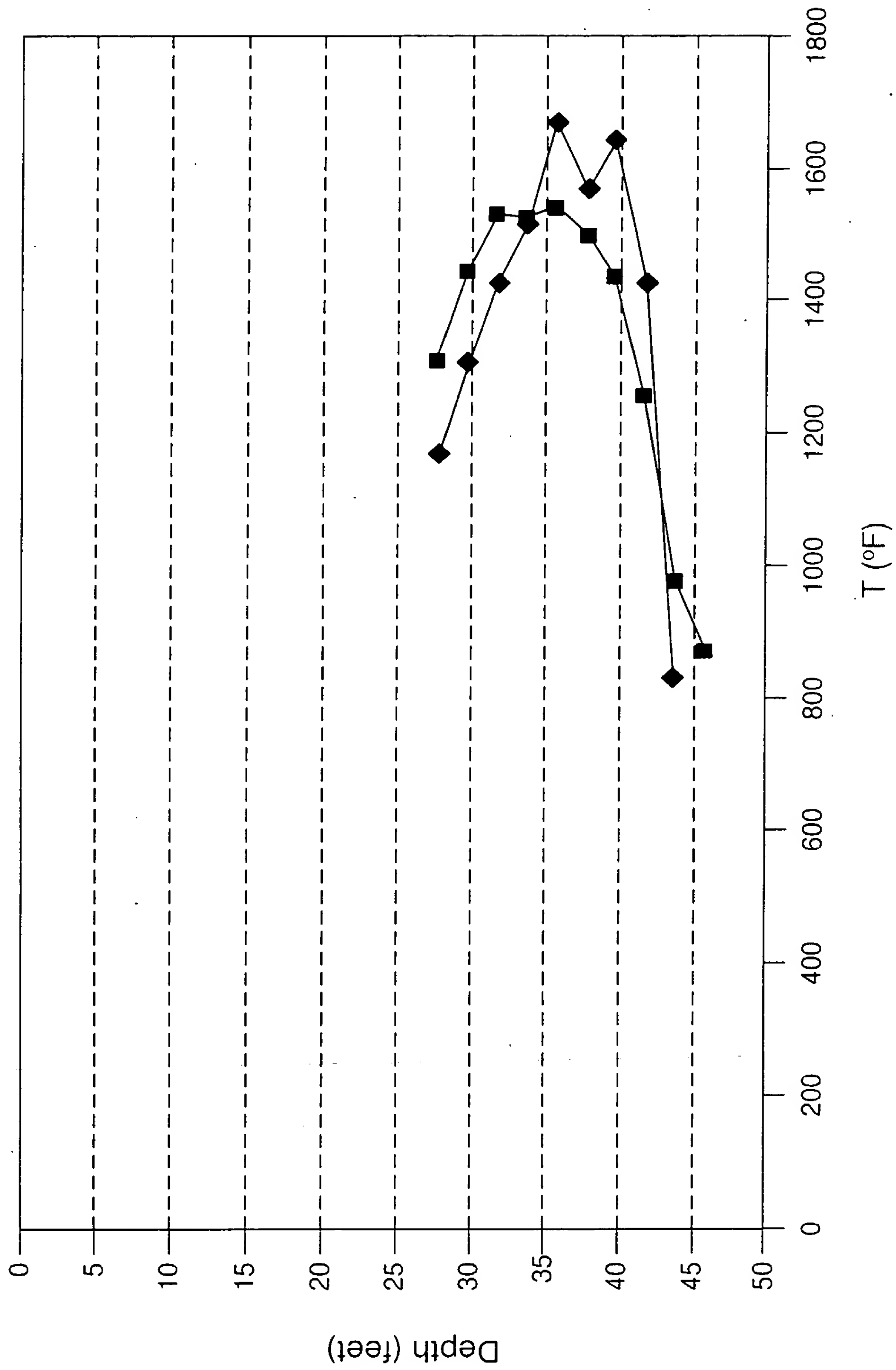


FIG. 130



FIG. 131

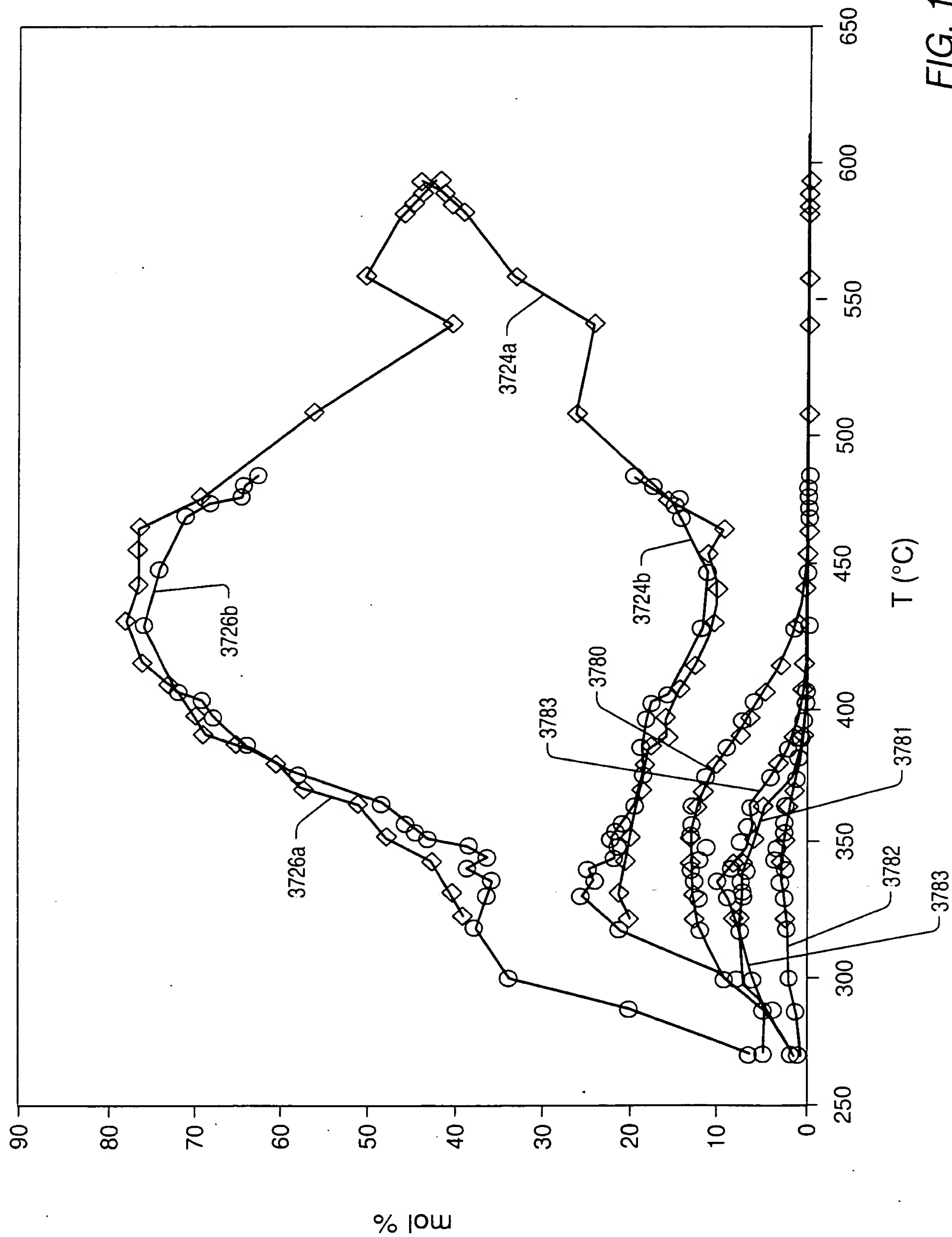


FIG. 131



polypropylene

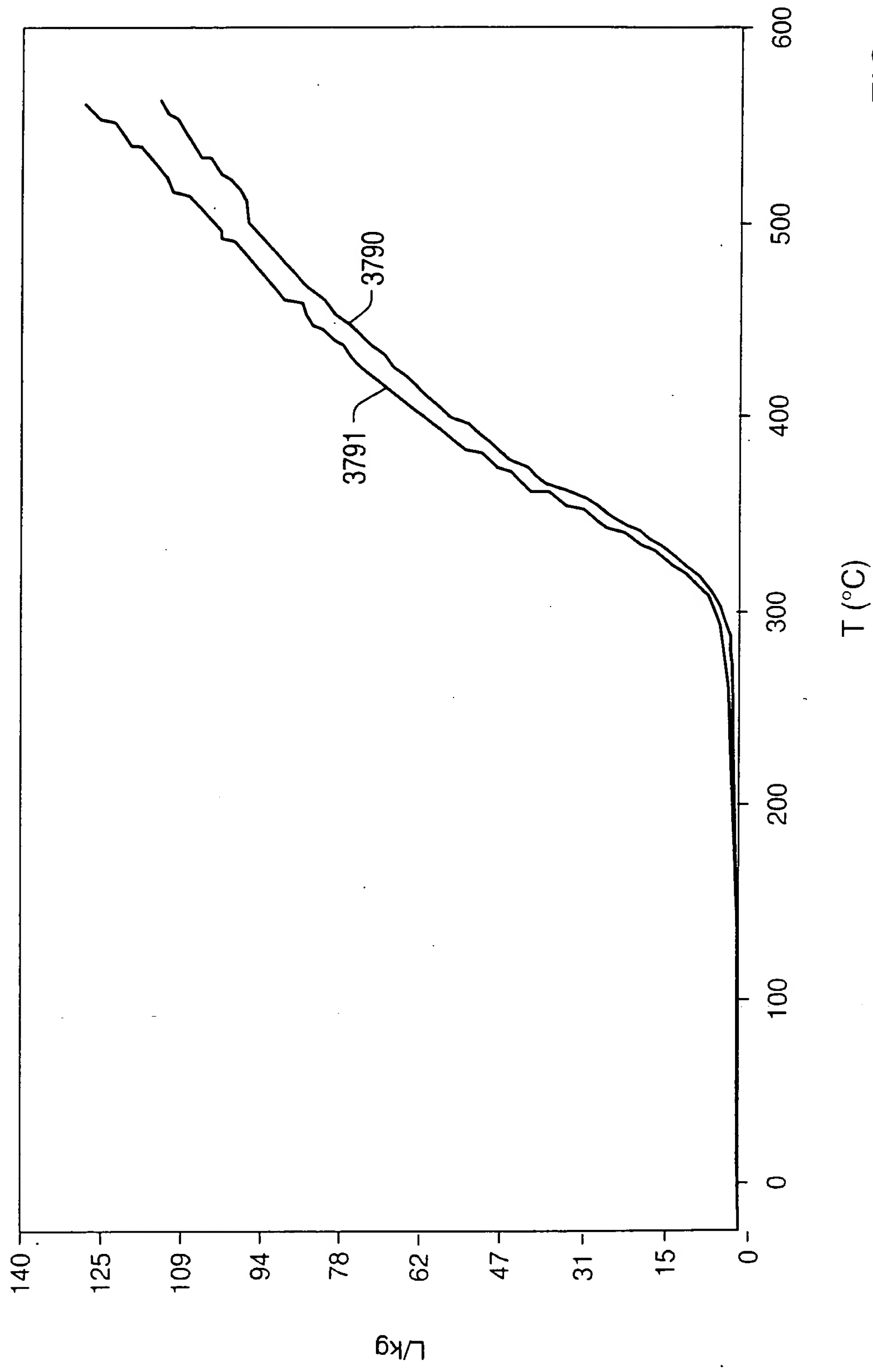


FIG. 132



Figure 133 shows the temperature dependence of the heat capacity of the polymer. The heat capacity is plotted as a function of temperature from 0 to 600°C. The curve shows a sharp increase in heat capacity around 370°C, which is characteristic of a glass transition. The data points are represented by open circles and open squares, and the curve is drawn through them.

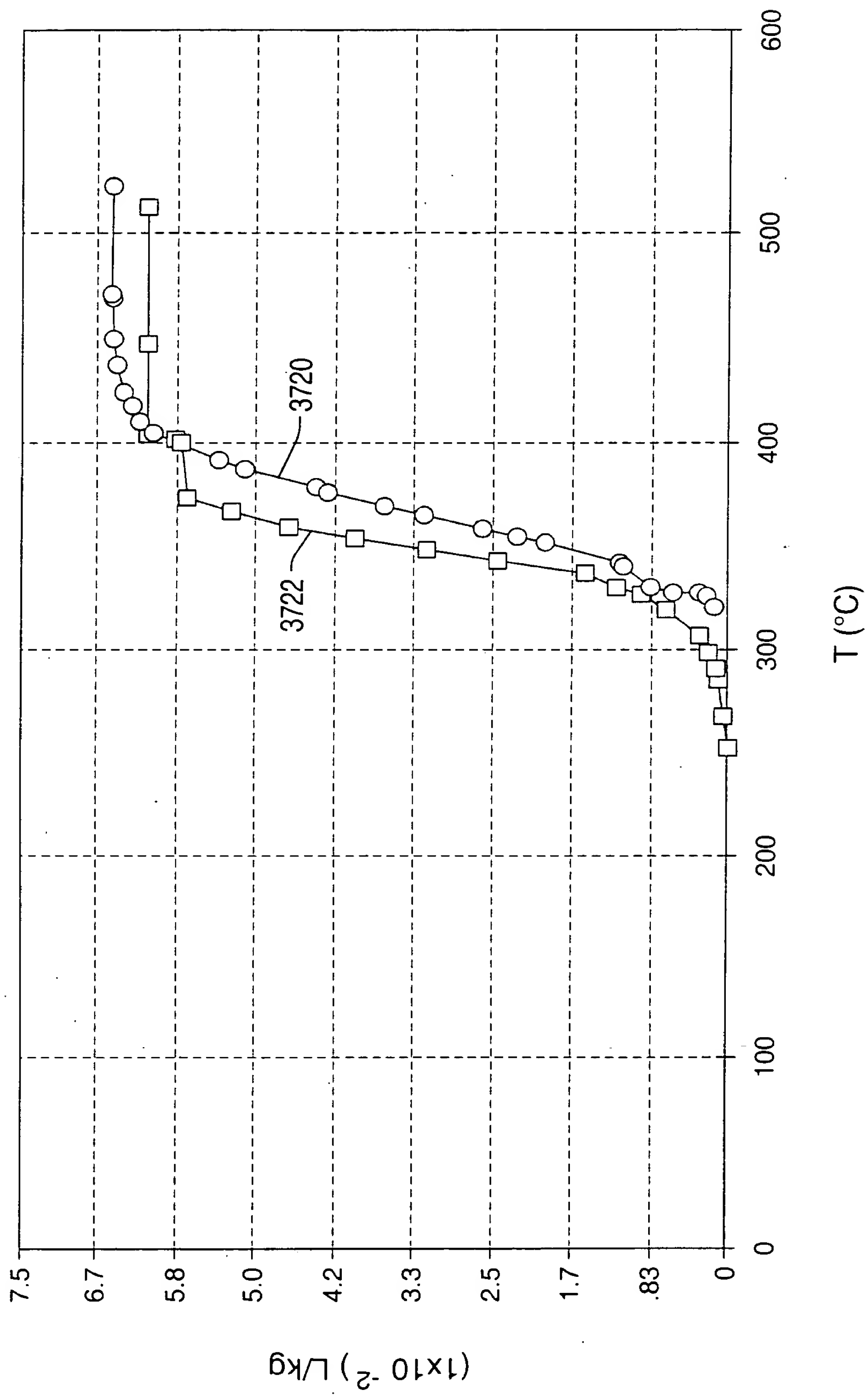


FIG. 133



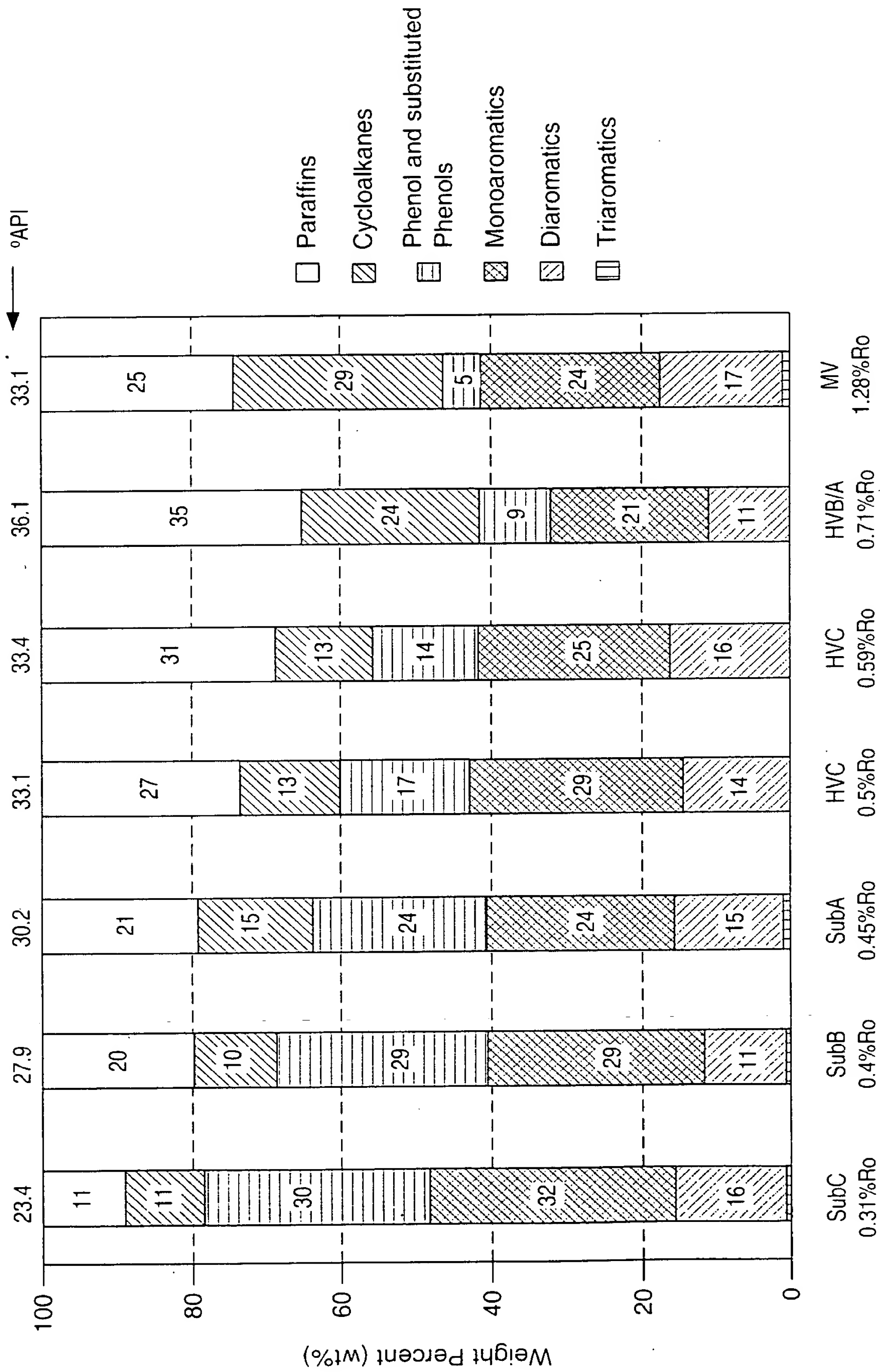


FIG. 134



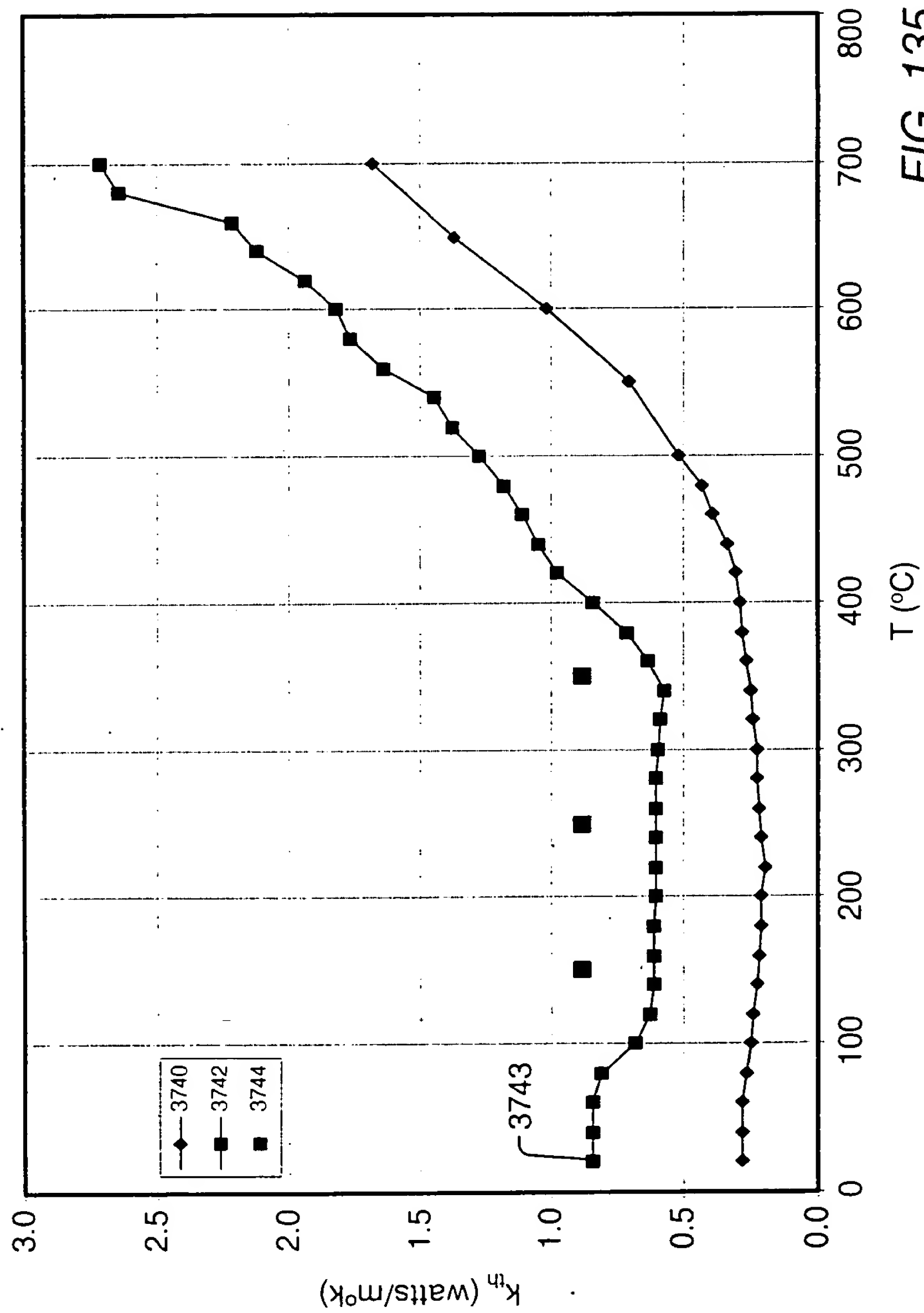


FIG. 135



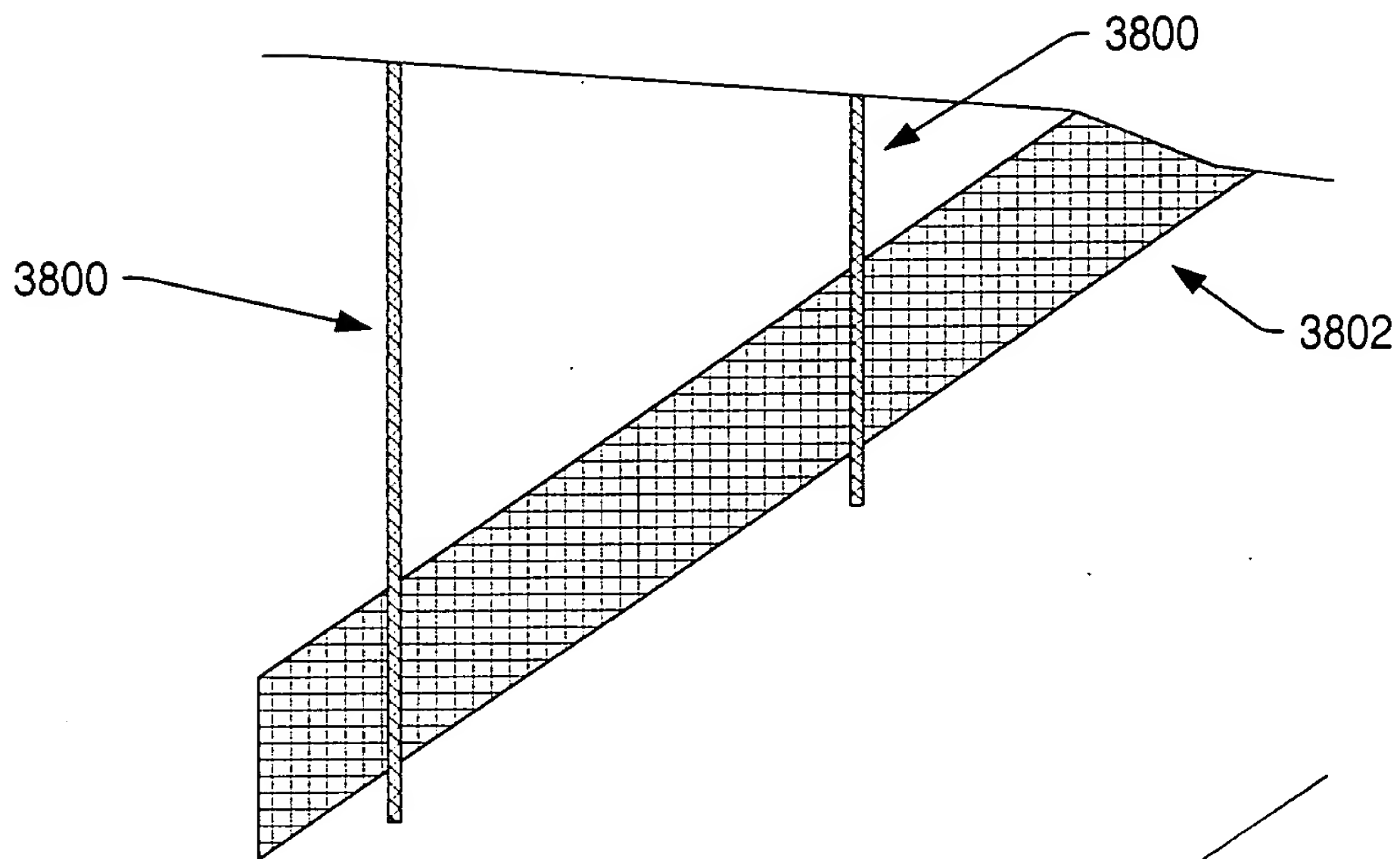


FIG. 136



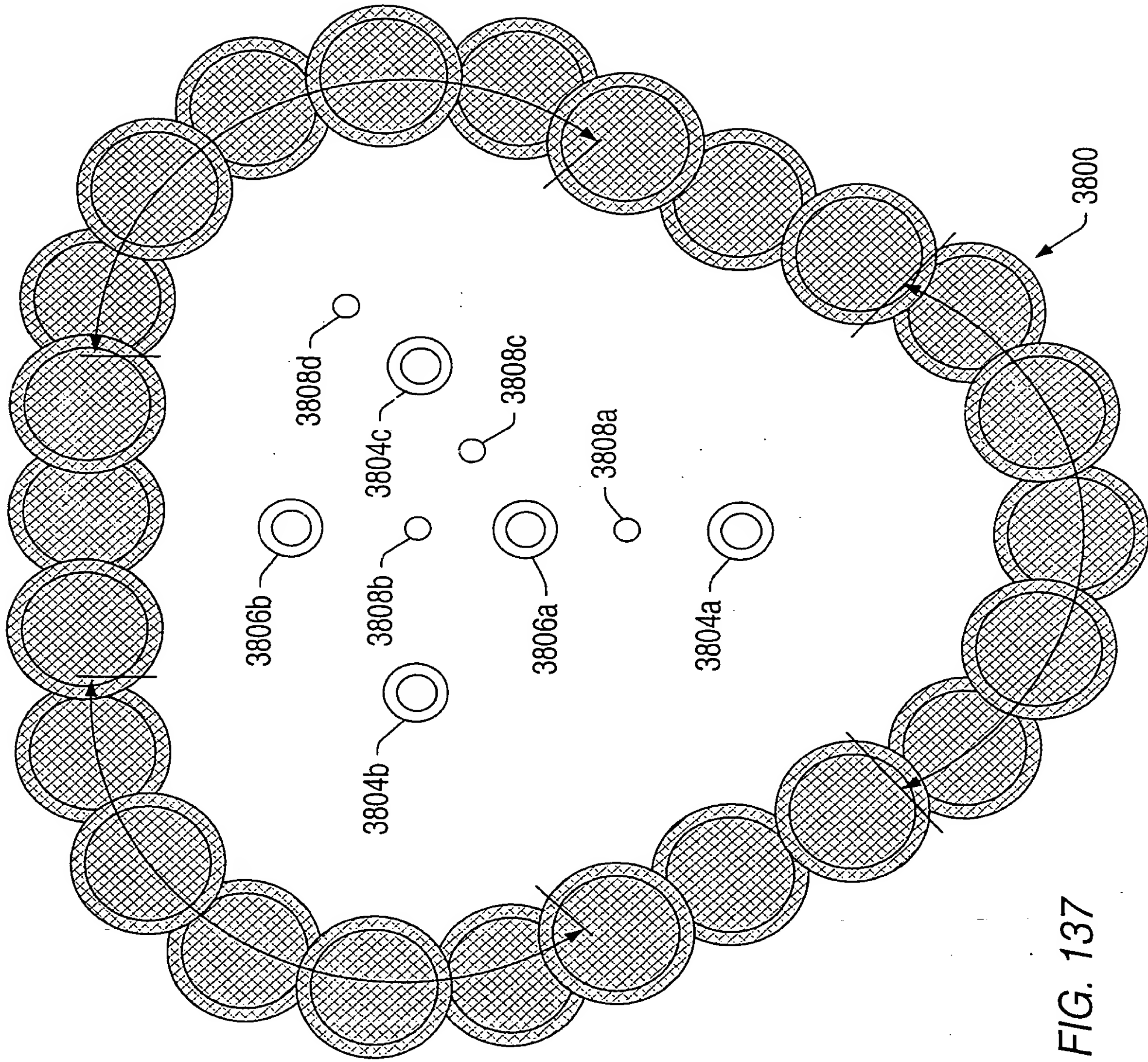


FIG. 137



1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423
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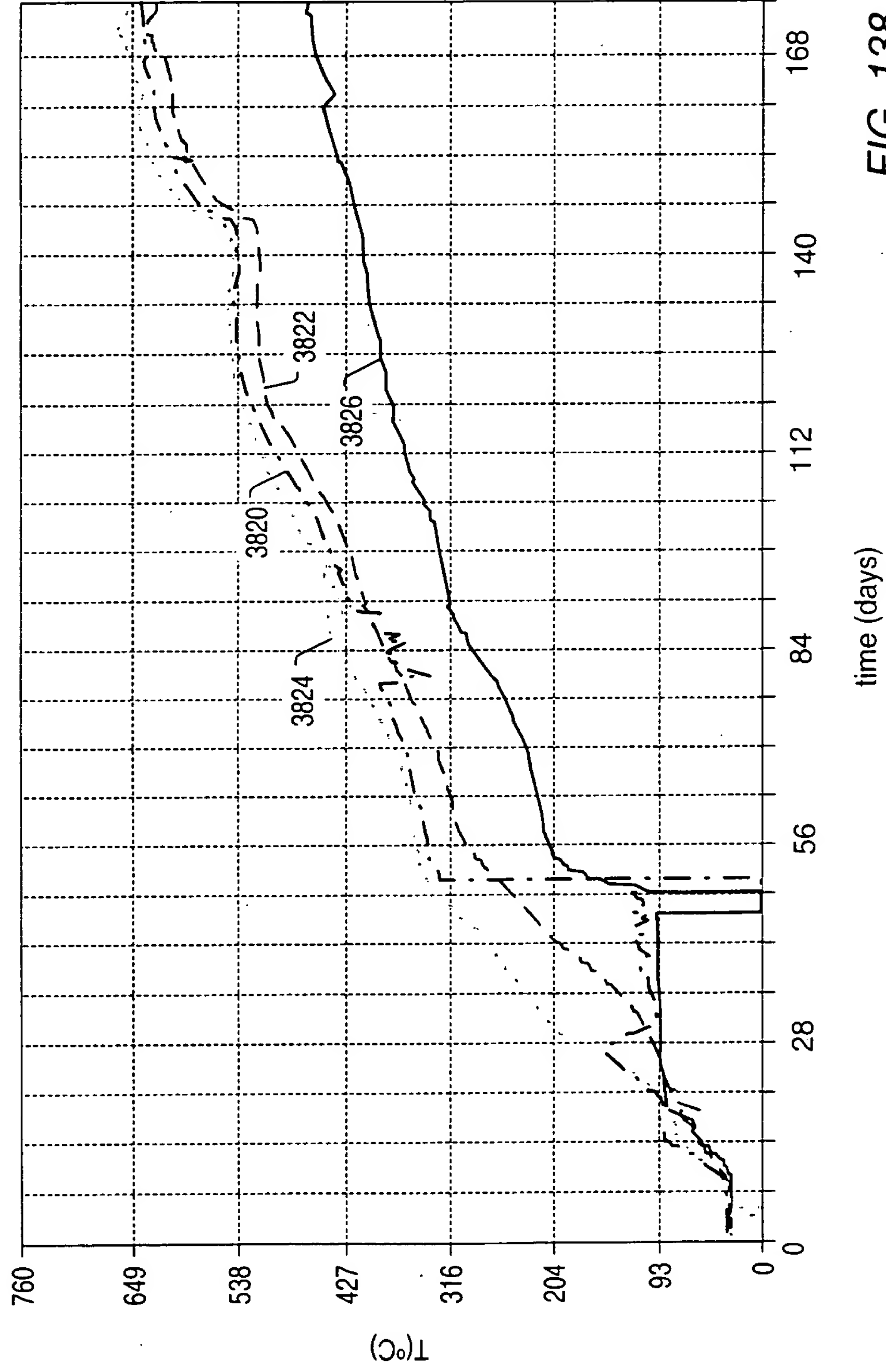


FIG. 138



1000 900 800 700 600 500 400 300 200 100 0

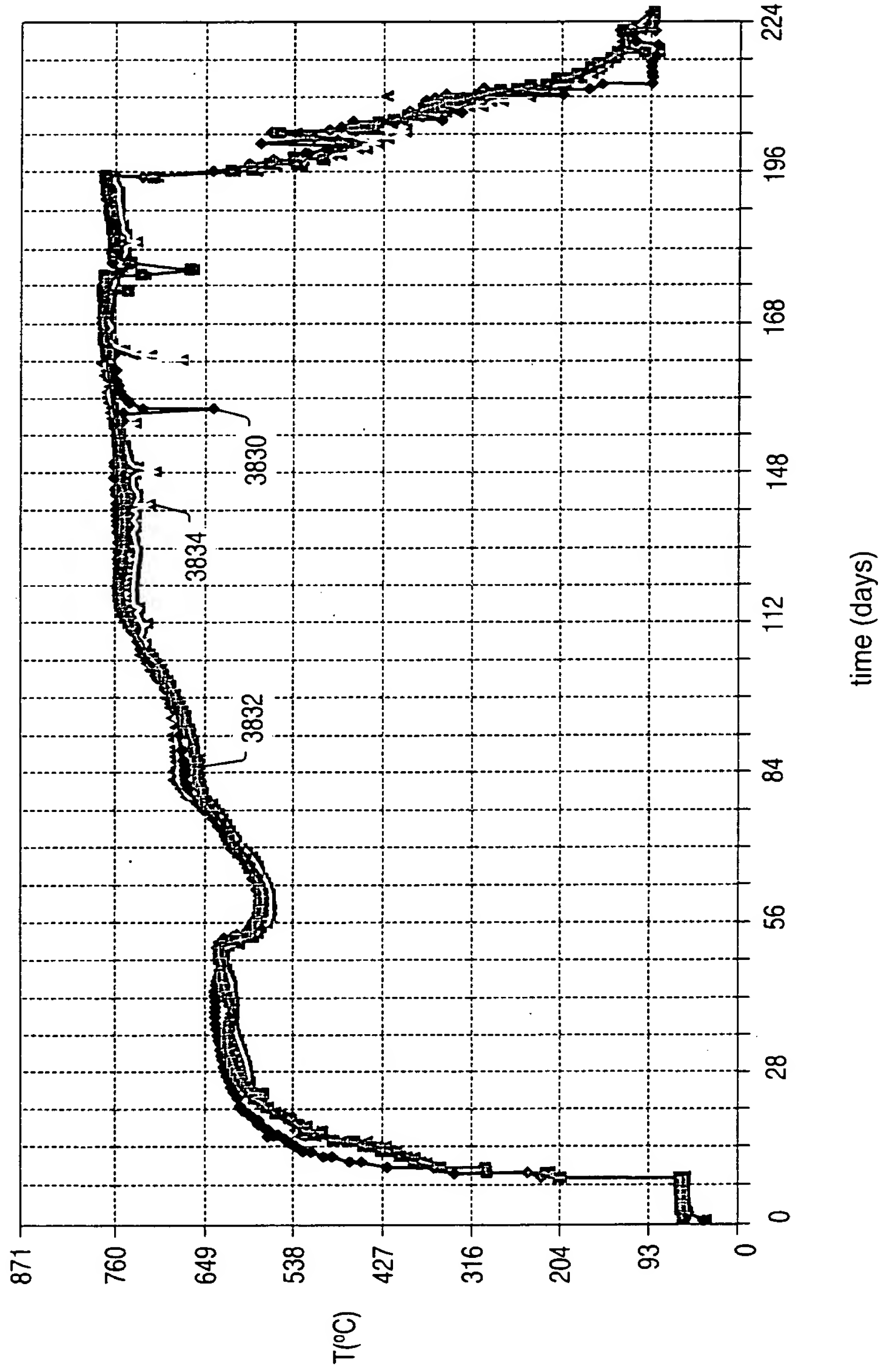
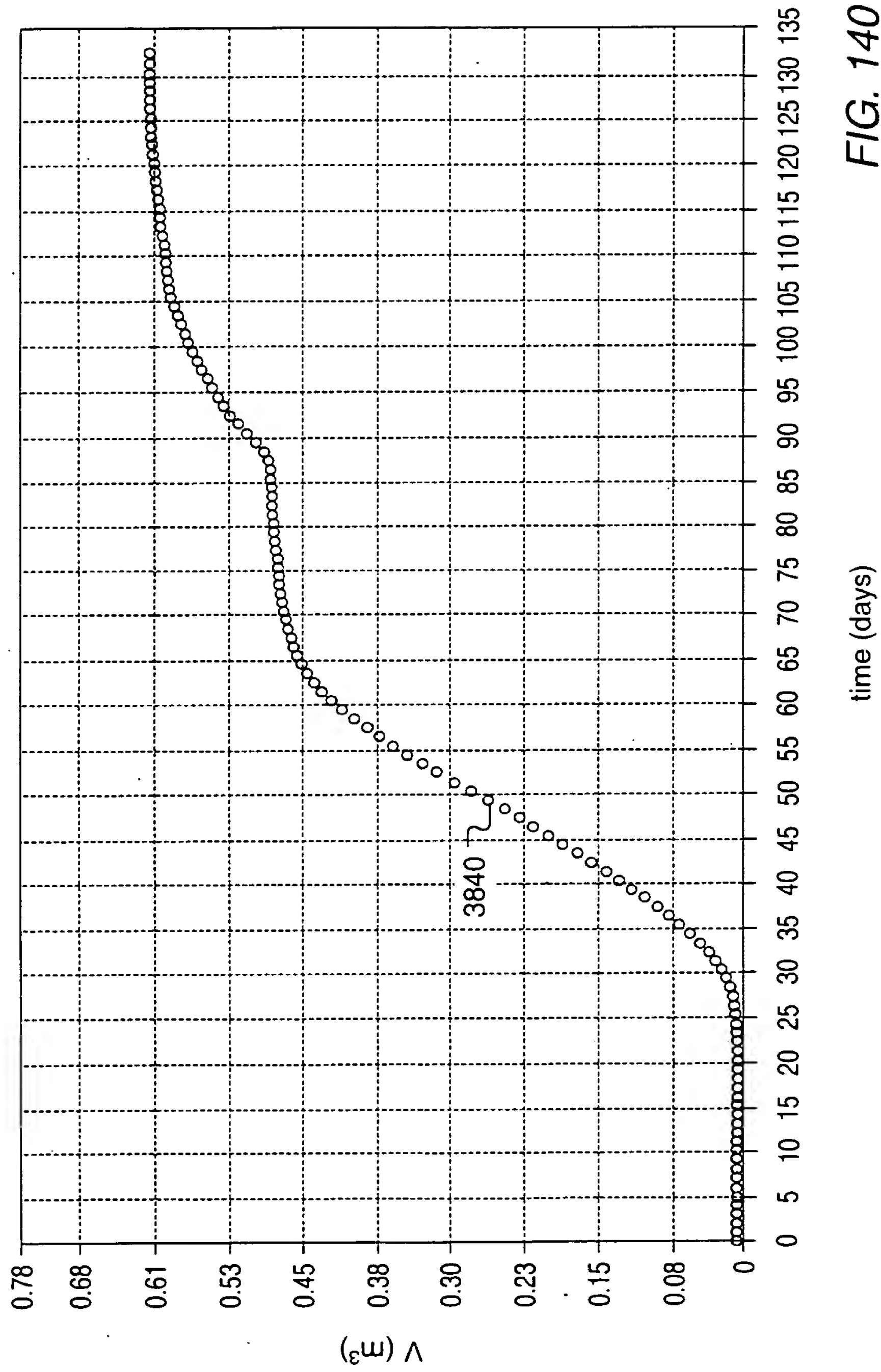


FIG. 139



11706	11707	11708	11709	11710	11711	11712	11713	11714	11715	11716	11717	11718	11719	11720	11721	11722	11723	11724	11725	11726	11727	11728	11729	11730	11731	11732	11733	11734	11735	11736	11737	11738	11739	11740	11741	11742	11743	11744	11745	11746	11747	11748	11749	11750	11751	11752	11753	11754	11755	11756	11757	11758	11759	11760	11761	11762	11763	11764	11765	11766	11767	11768	11769	11770	11771	11772	11773	11774	11775	11776	11777	11778	11779	11780	11781	11782	11783	11784	11785	11786	11787	11788	11789	11790	11791	11792	11793	11794	11795	11796	11797	11798	11799	11800	11801	11802	11803	11804	11805	11806	11807	11808	11809	11810	11811	11812	11813	11814	11815	11816	11817	11818	11819	11820	11821	11822	11823	11824	11825	11826	11827	11828	11829	11830	11831	11832	11833	11834	11835	11836	11837	11838	11839	11840	11841	11842	11843	11844	11845	11846	11847	11848	11849	11850	11851	11852	11853	11854	11855	11856	11857	11858	11859	11860	11861	11862	11863	11864	11865	11866	11867	11868	11869	11870	11871	11872	11873	11874	11875	11876	11877	11878	11879	11880	11881	11882	11883	11884	11885	11886	11887	11888	11889	11890	11891	11892	11893	11894	11895	11896	11897	11898	11899	11900	11901	11902	11903	11904	11905	11906	11907	11908	11909	11910	11911	11912	11913	11914	11915	11916	11917	11918	11919	11920	11921	11922	11923	11924	11925	11926	11927	11928	11929	11930	11931	11932	11933	11934	11935	11936	11937	11938	11939	11940	11941	11942	11943	11944	11945	11946	11947	11948	11949	11950	11951	11952	11953	11954	11955	11956	11957	11958	11959	11960	11961	11962	11963	11964	11965	11966	11967	11968	11969	11970	11971	11972	11973	11974	11975	11976	11977	11978	11979	11980	11981	11982	11983	11984	11985	11986	11987	11988	11989	11990	11991	11992	11993	11994	11995	11996	11997	11998	11999	12000
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100 90 80 70 60 50 40 30 20 10 0

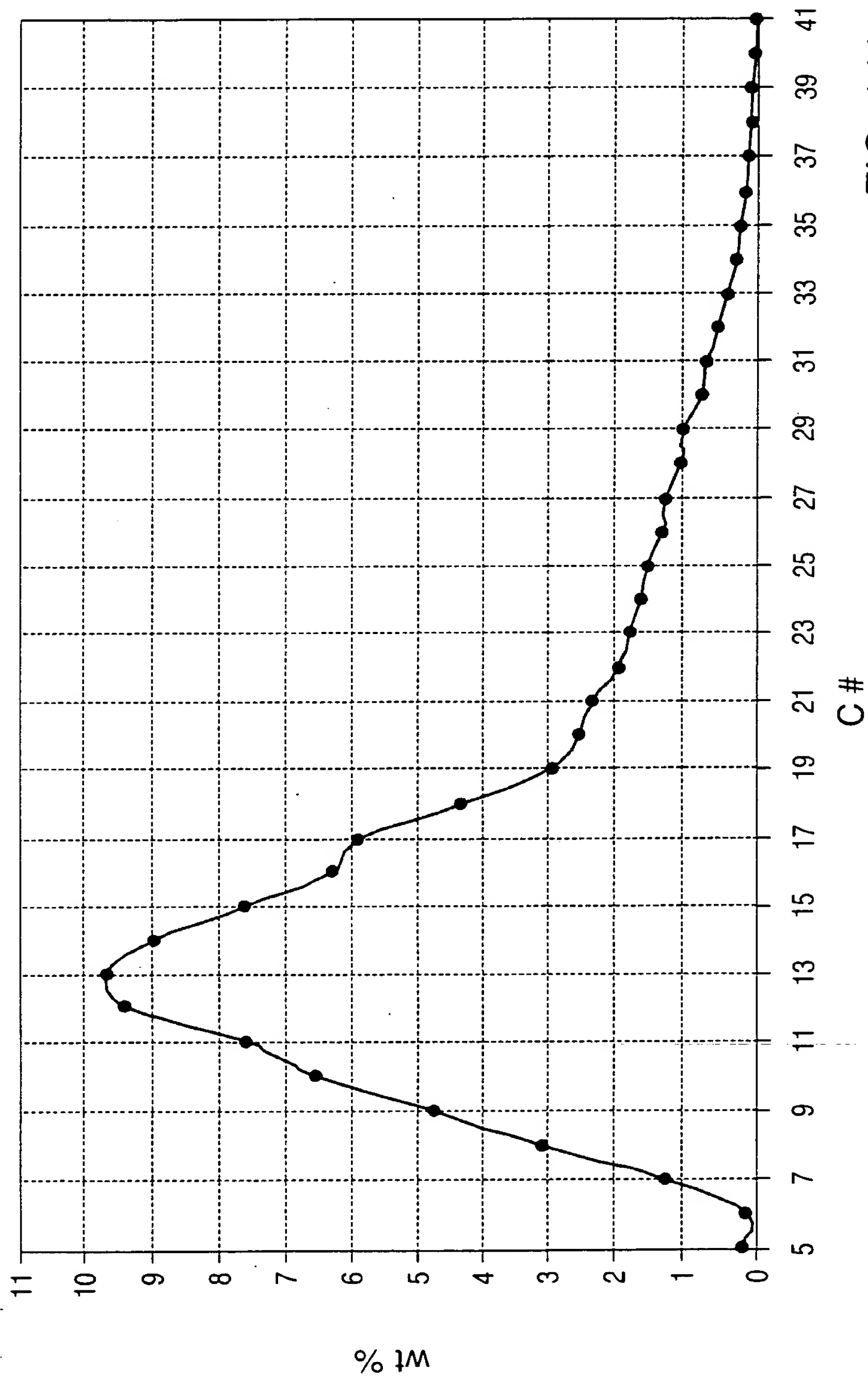


FIG. 141



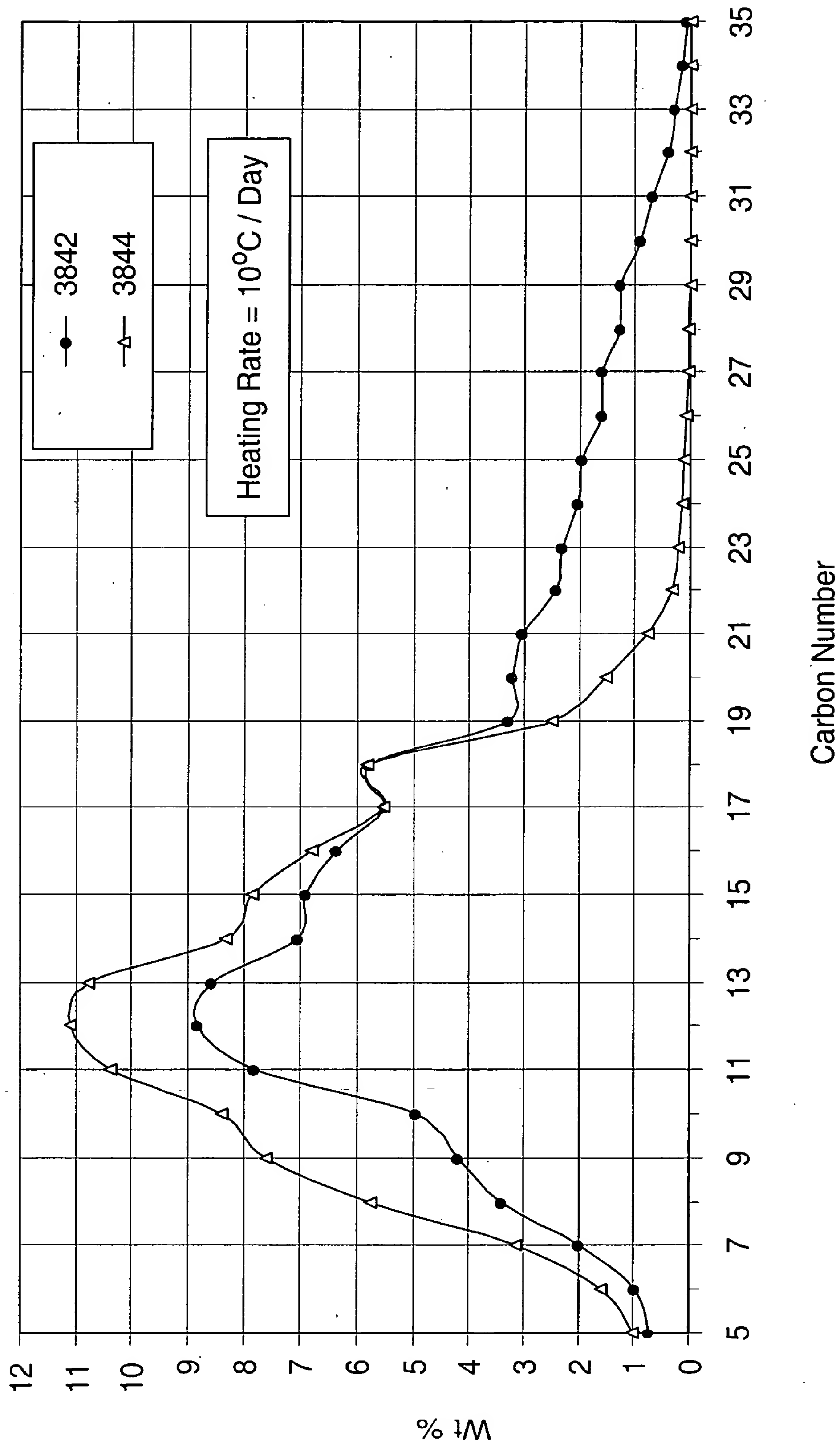


FIG. 142



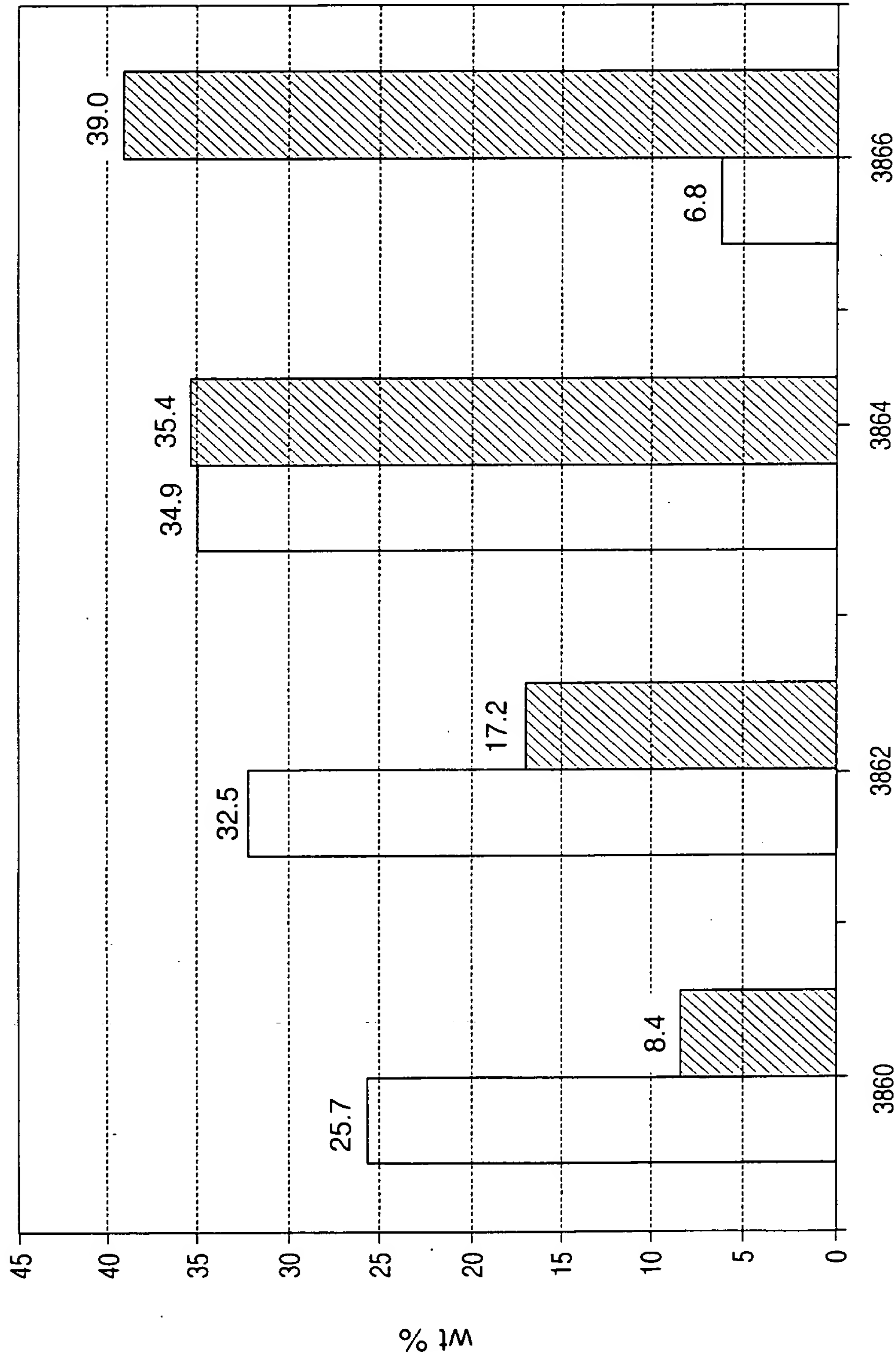


FIG. 143



Figure 144 is a graph showing the Ethene/Ethane Ratio versus the temperature rate in °C/day. The Y-axis represents the Ethene/Ethane Ratio, ranging from 0% to 20% in 2% increments. The X-axis represents the temperature rate, ranging from 1 to 100,000 °C/day on a logarithmic scale. The graph shows a sharp increase in the Ethene/Ethane Ratio as the temperature rate increases, starting around 2% at 10 °C/day and reaching approximately 19% at 100,000 °C/day.

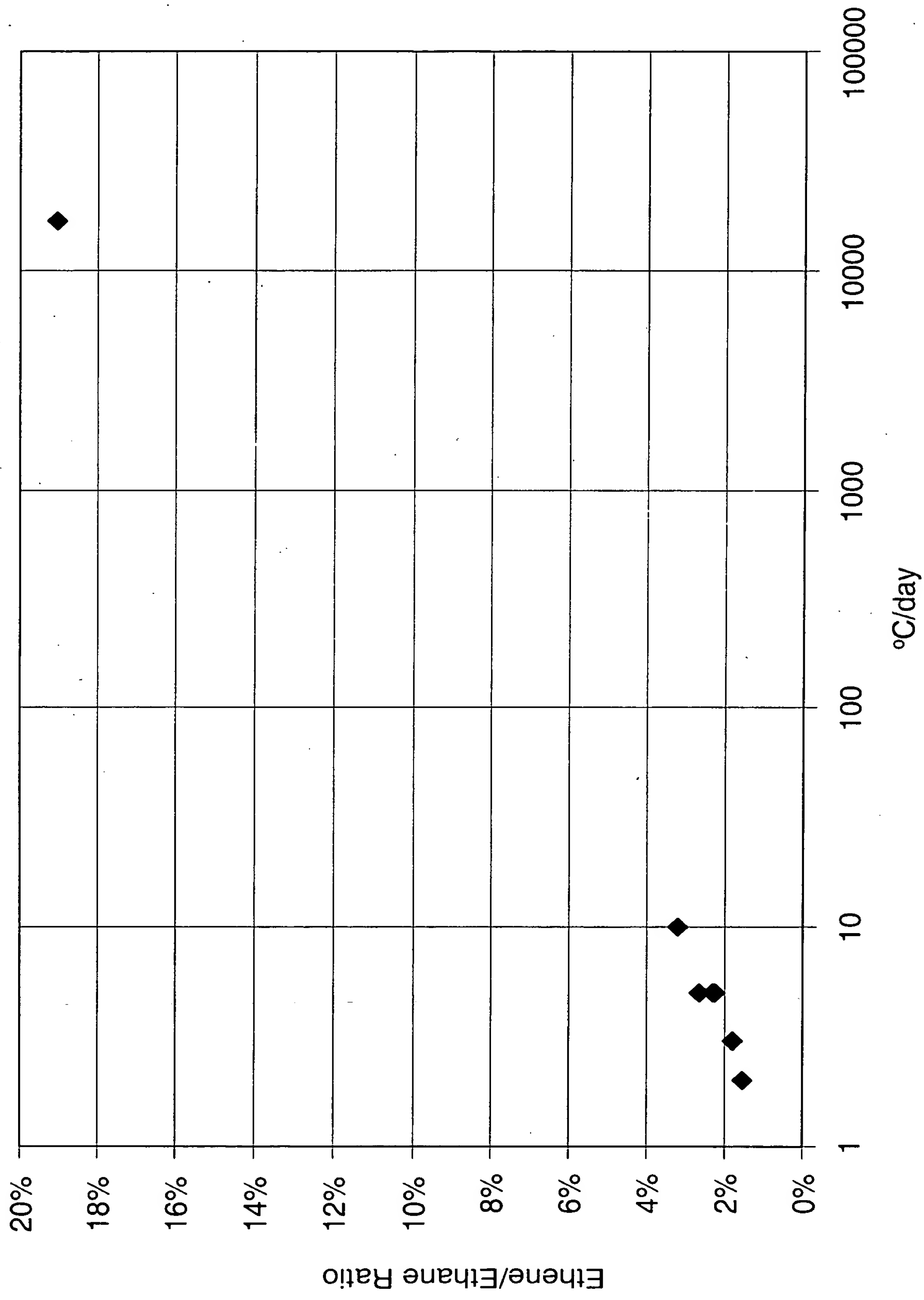


FIG. 144



API Gravity vs. Heating Rate

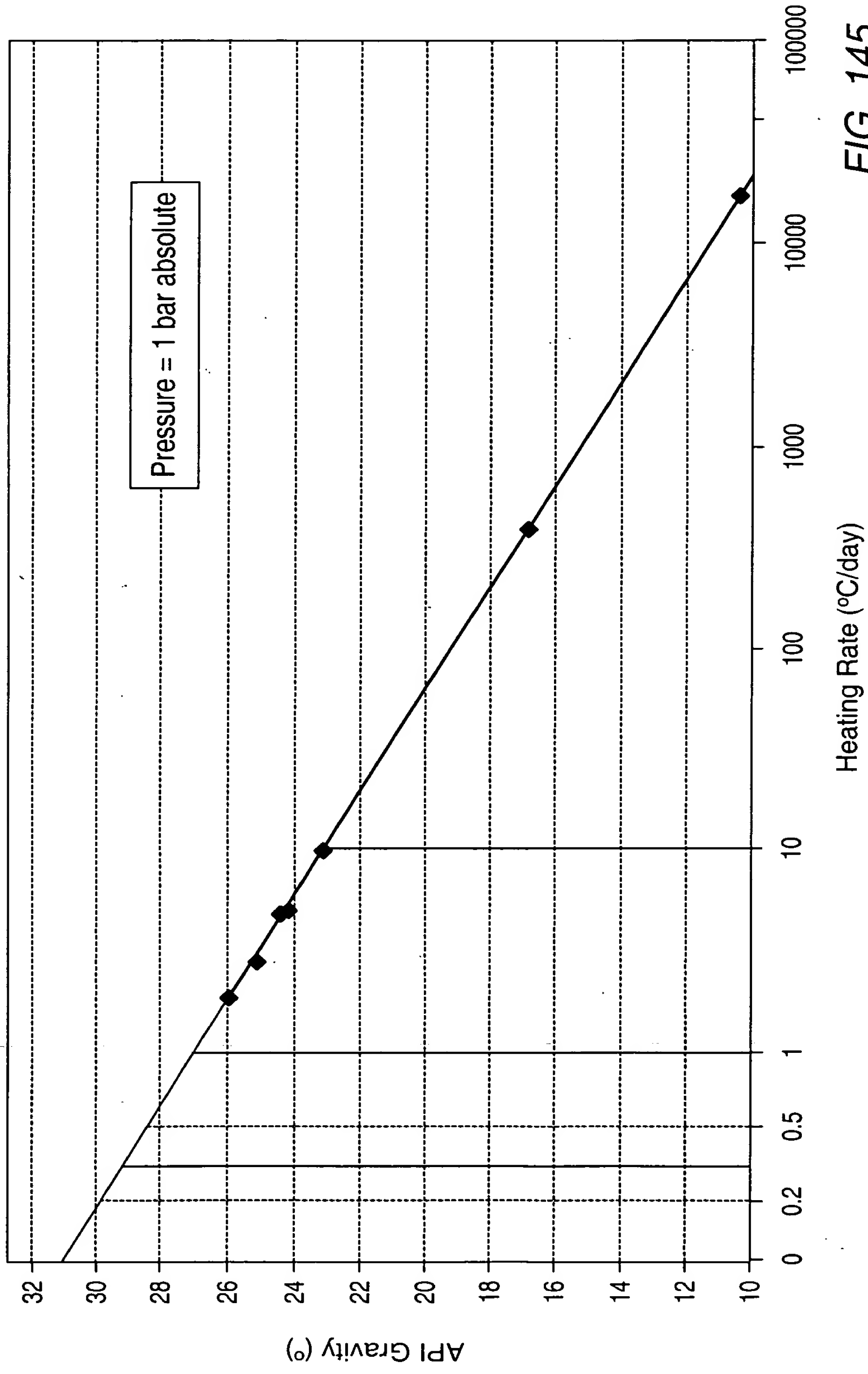
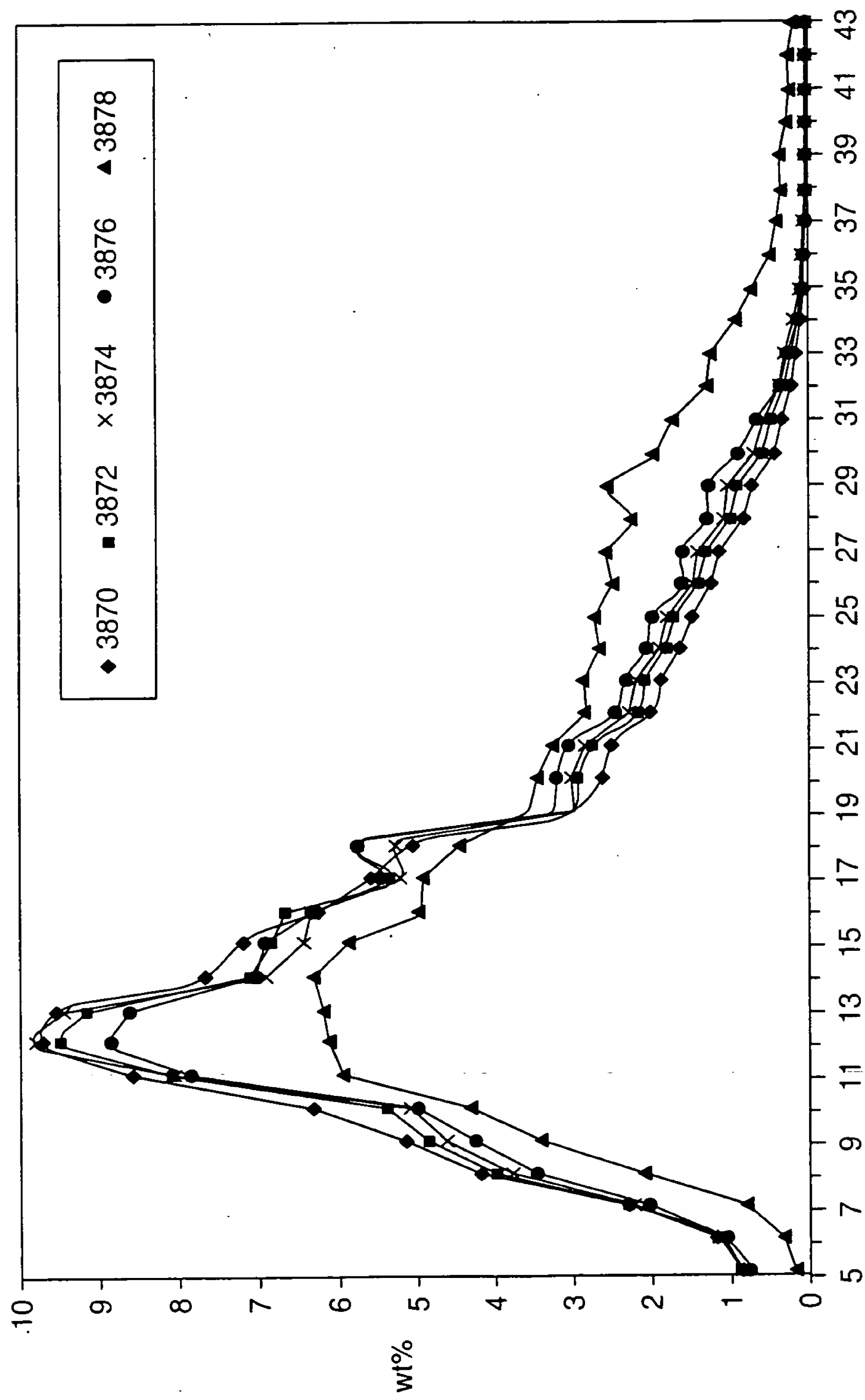


FIG. 145



Figure 146 shows the weight percentage (wt%) of various components (3870, 3872, 3874, 3876, 3878) as a function of the component number (C. No.). The x-axis represents the component number (C. No.) from 5 to 43, and the y-axis represents the weight percentage (wt%) from 0 to 10. The legend indicates that the data series are: 3870 (diamond), 3872 (square), 3874 (cross), 3876 (circle), and 3878 (triangle). The graph shows that the weight percentage of these components generally increases with the component number, with a notable peak around component 13-15 and a secondary peak around component 21-23.



C. No.

FIG. 146



CO<sub>2</sub> (%) vs. t (minutes)

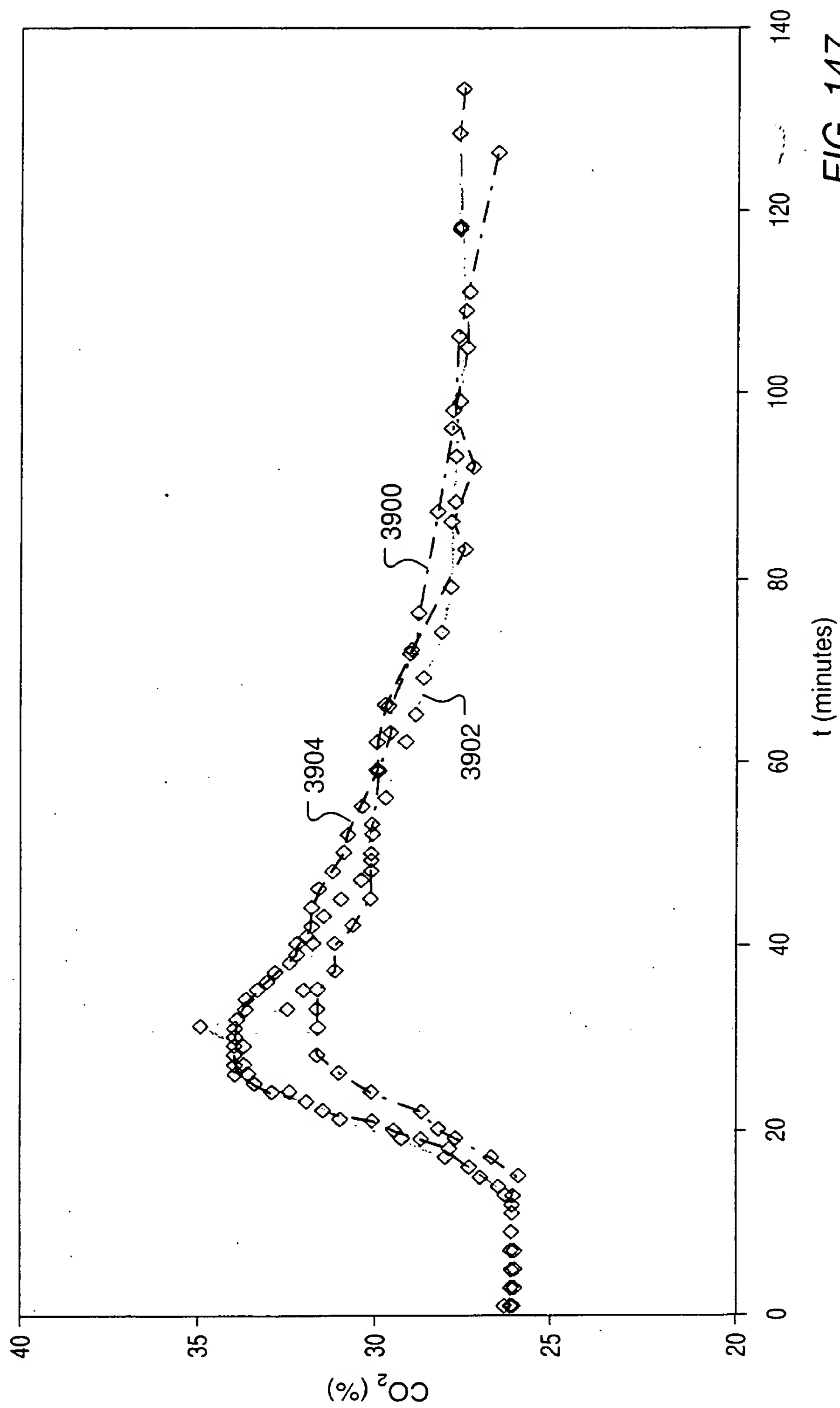


FIG. 147



The graph shows the relationship between cumulative energy and weight for EIC 110. The weight increases as cumulative energy increases, with a significant increase in weight between 40,000 and 100,000 kw-hr.

Cumulative Energy (kw-hr)	Weight (kg)
0	0
20,000	~100
40,000	~2270
60,000	~4540
80,000	~6800
100,000	~9070
120,000	~11300
140,000	~1400

KW-hr



Figure 149 shows the relationship between the volume of water (V) and time (t) for a given system. The volume of water (V) is measured in cubic meters (m³) and time (t) is measured in days. The data points are plotted on a grid, showing a non-linear relationship that increases over time.

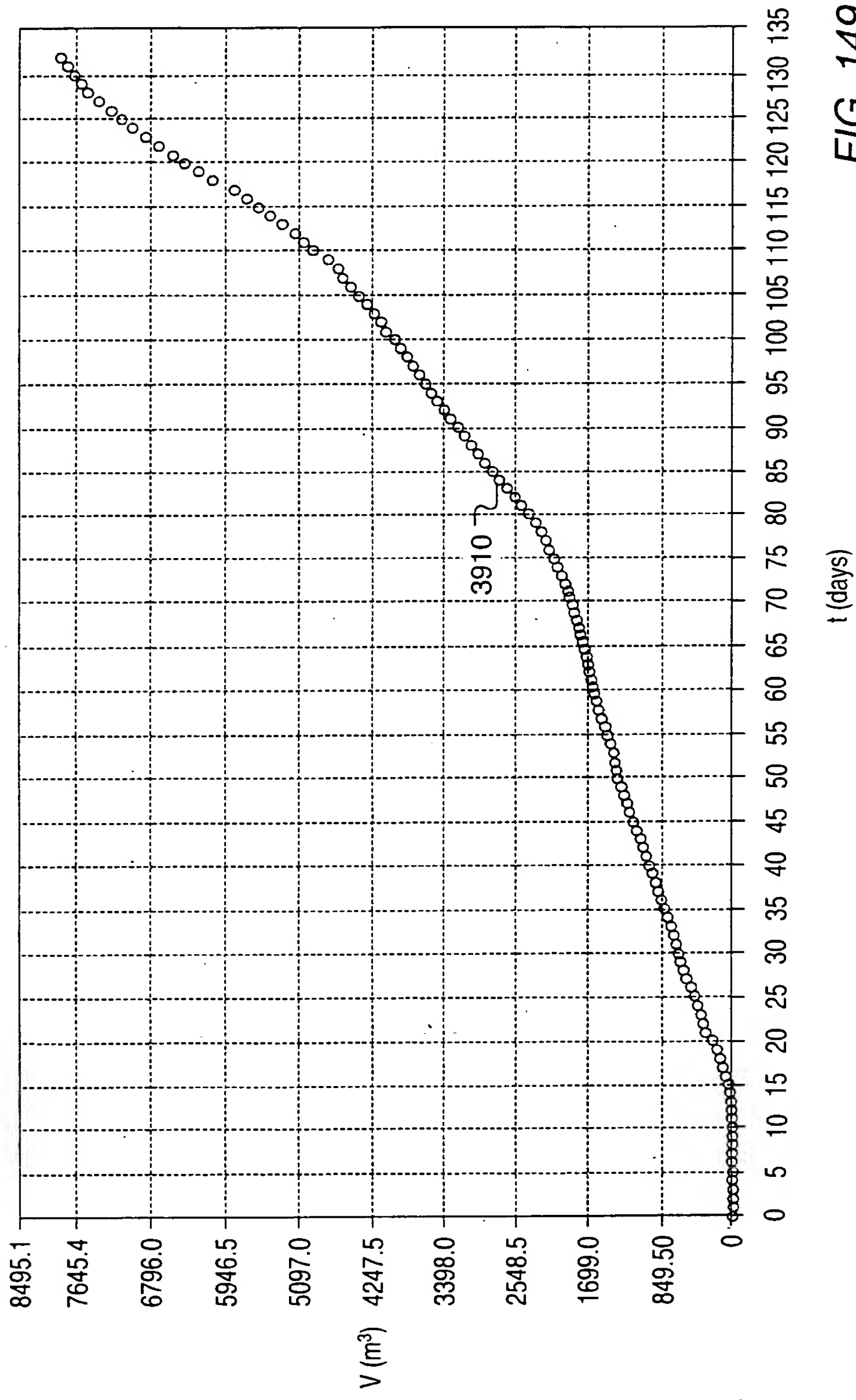
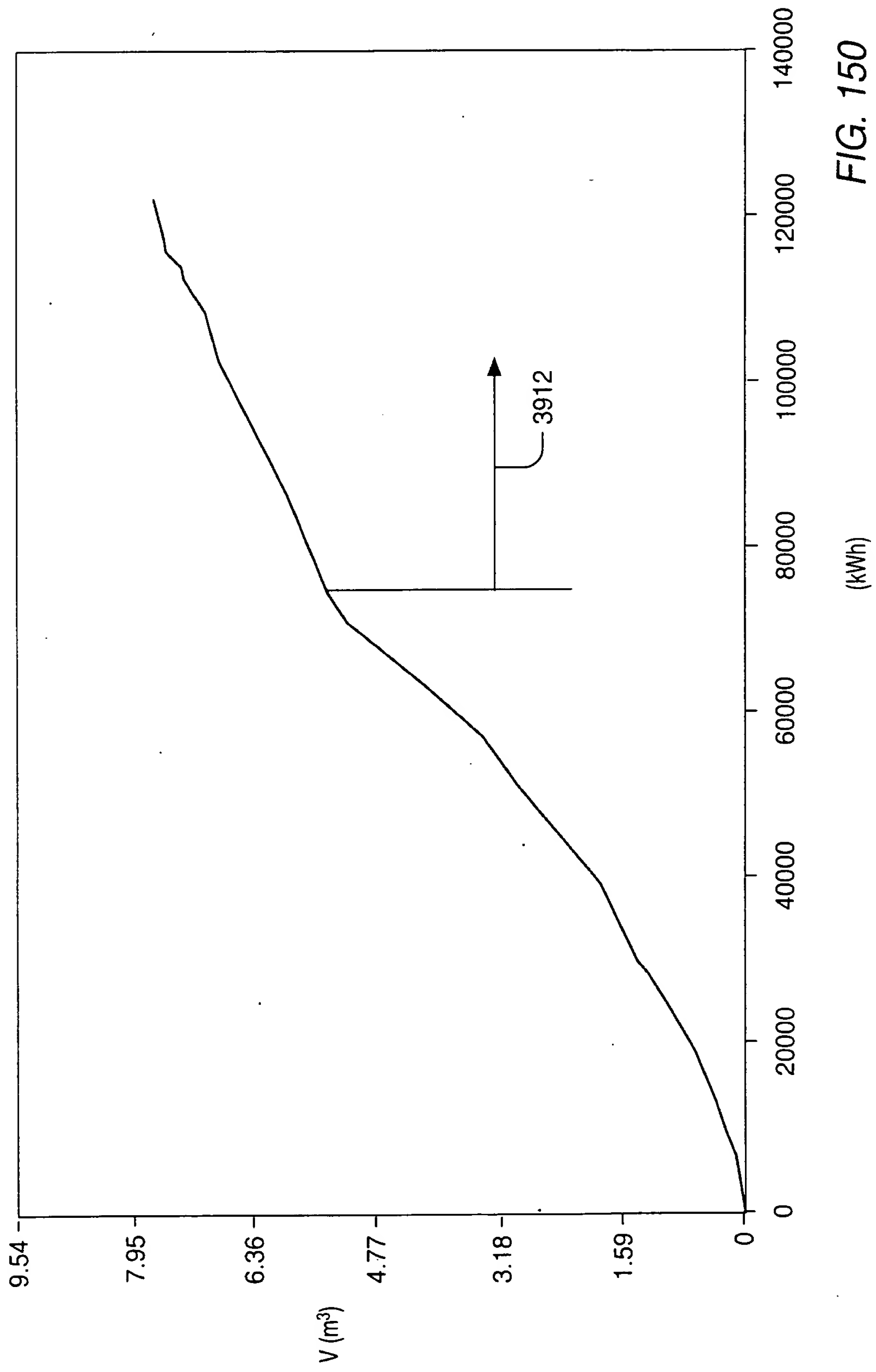


FIG. 149







The graph shows the relationship between flow rate in  $\text{m}^3/\text{min}$  (Y-axis) and  $\text{kg/h}$  (X-axis). The curve starts at the origin (0,0) and increases. Specific points on the curve are labeled with flow rates in  $\text{kg/h}$ : 3920, 3922, 3924, and 3926.

Flow Rate ( $\text{kg/h}$ )	Flow Rate ( $\text{m}^3/\text{min}$ )
0	0
3920	~0.045
3922	~0.068
3924	~0.091
3926	~0.113

(kg/h)



Figure 152 is a graph showing the relationship between the flow rate (m³/min) and the pressure drop (kg/h) for a system. The graph includes two curves, 3930 and 3932, and a set of data points represented by squares.

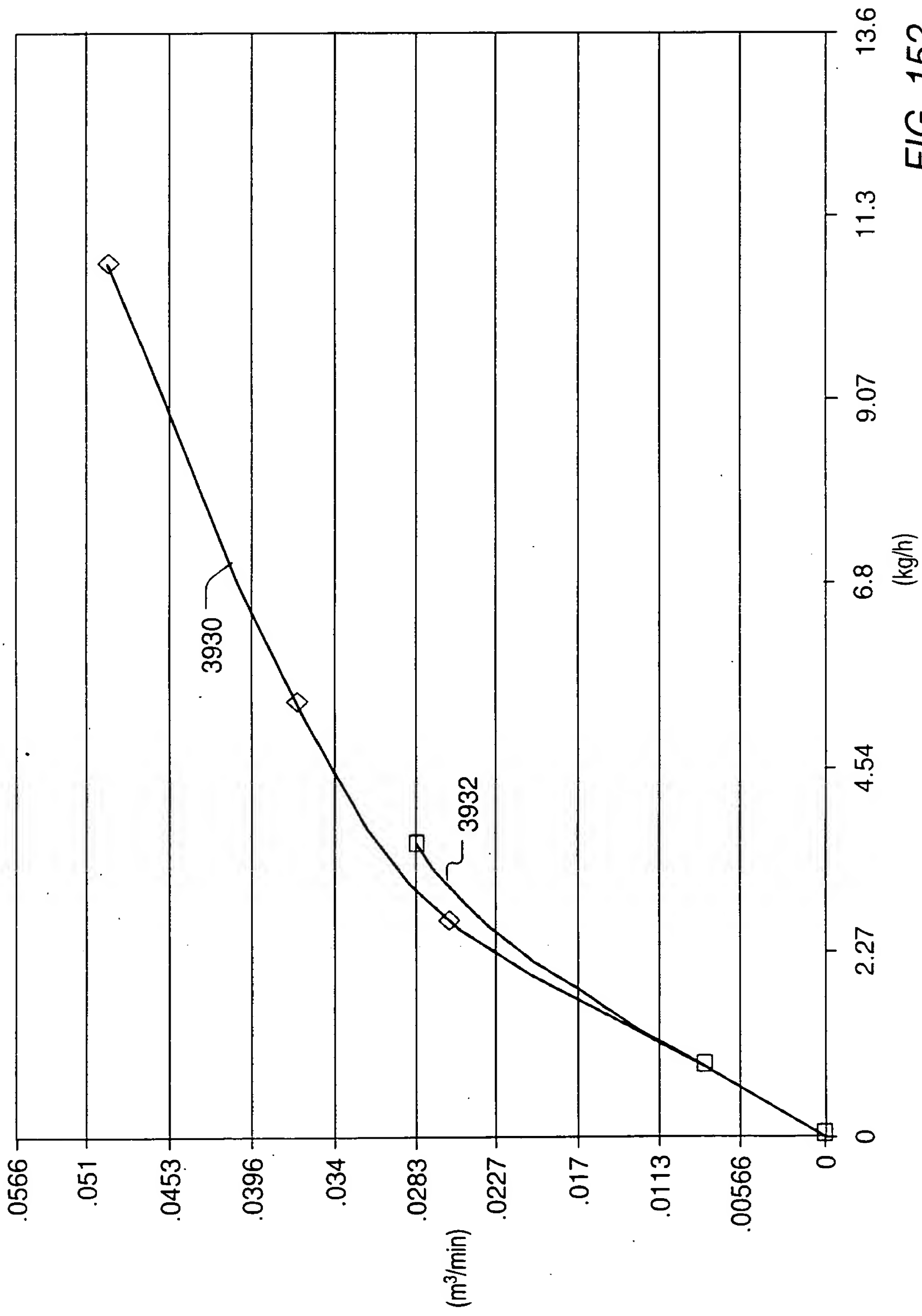


FIG. 152



1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323
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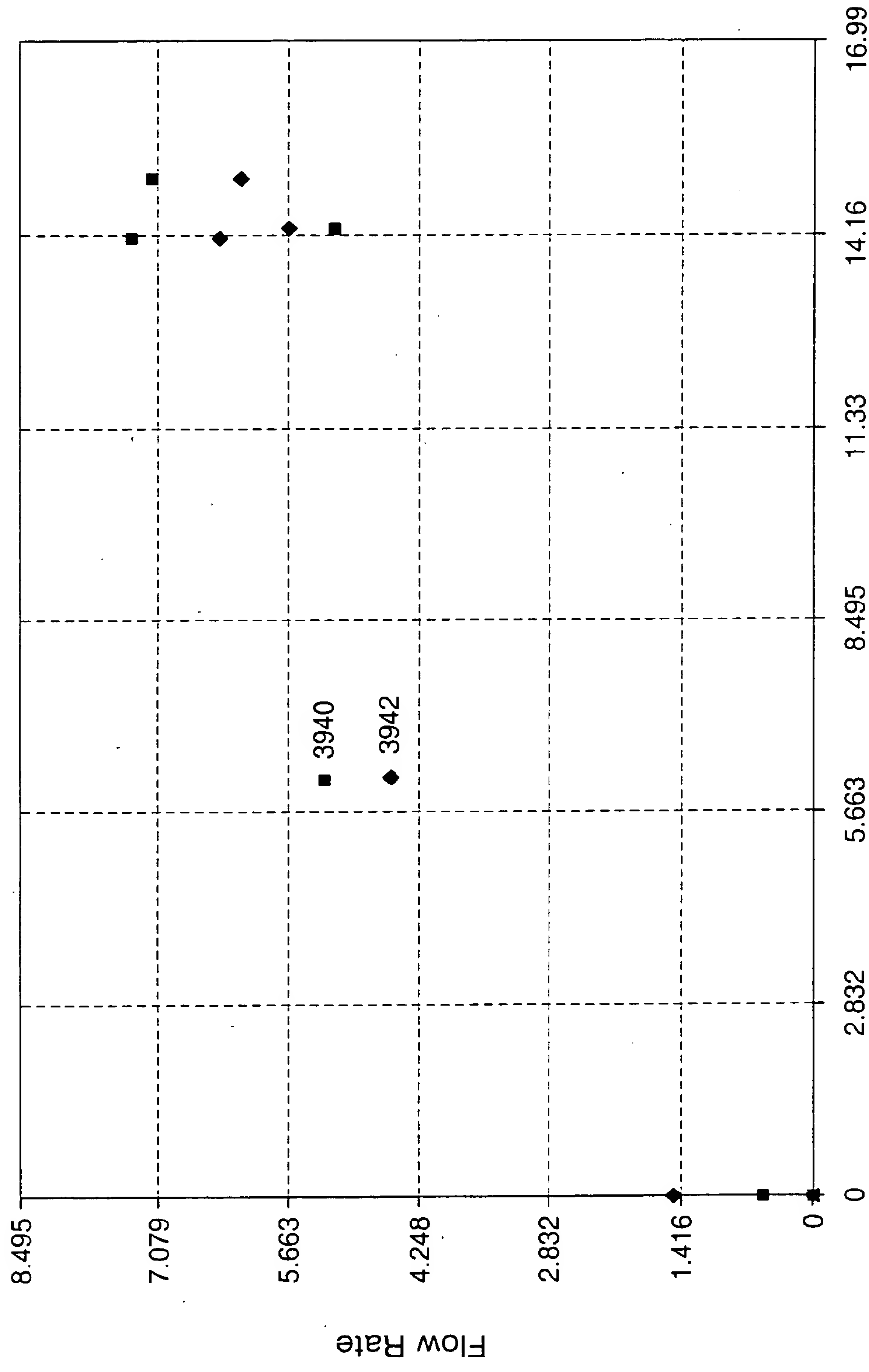
Methane Injection Rate ( $\text{m}^3/\text{hr}$ )

FIG. 153



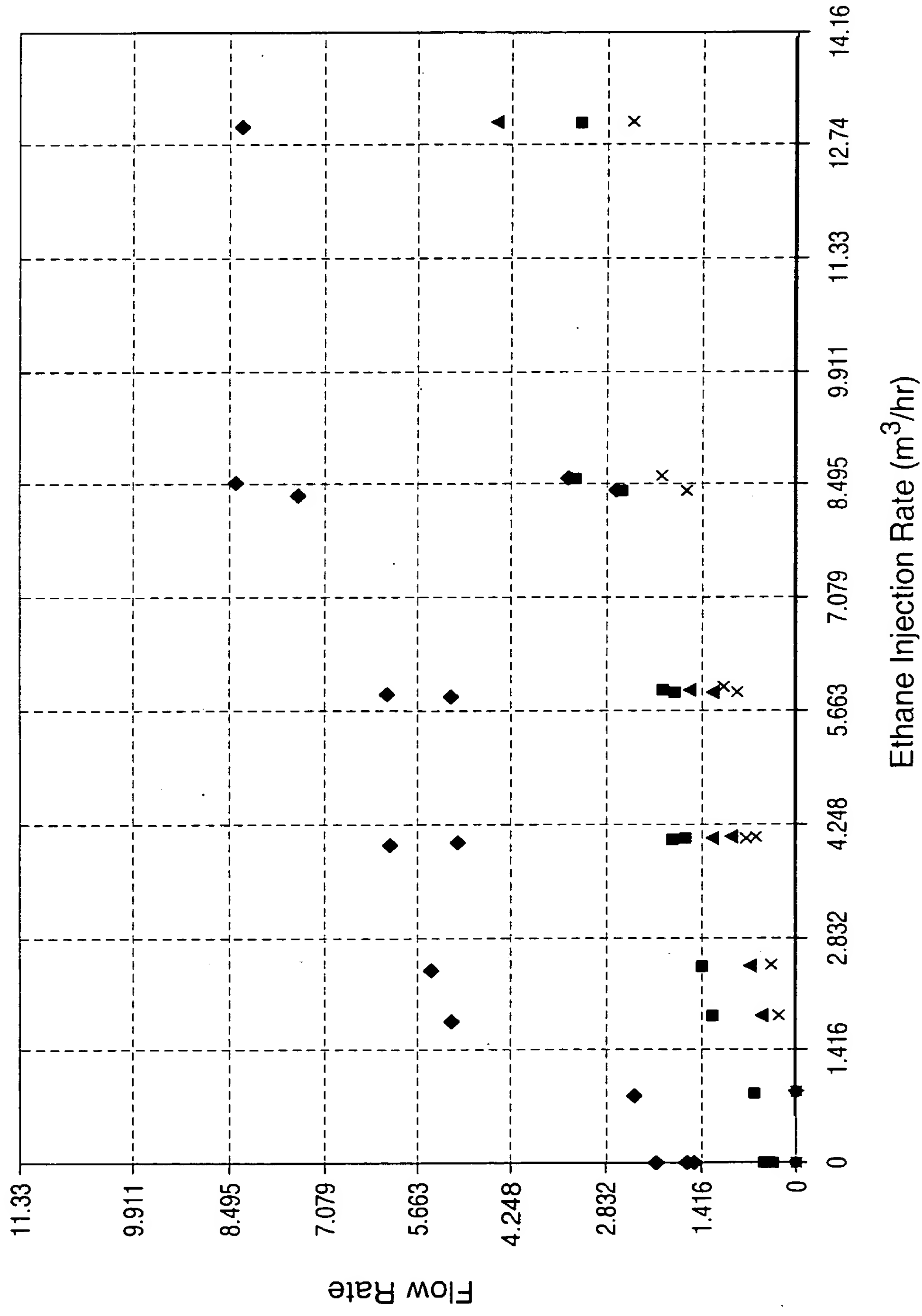
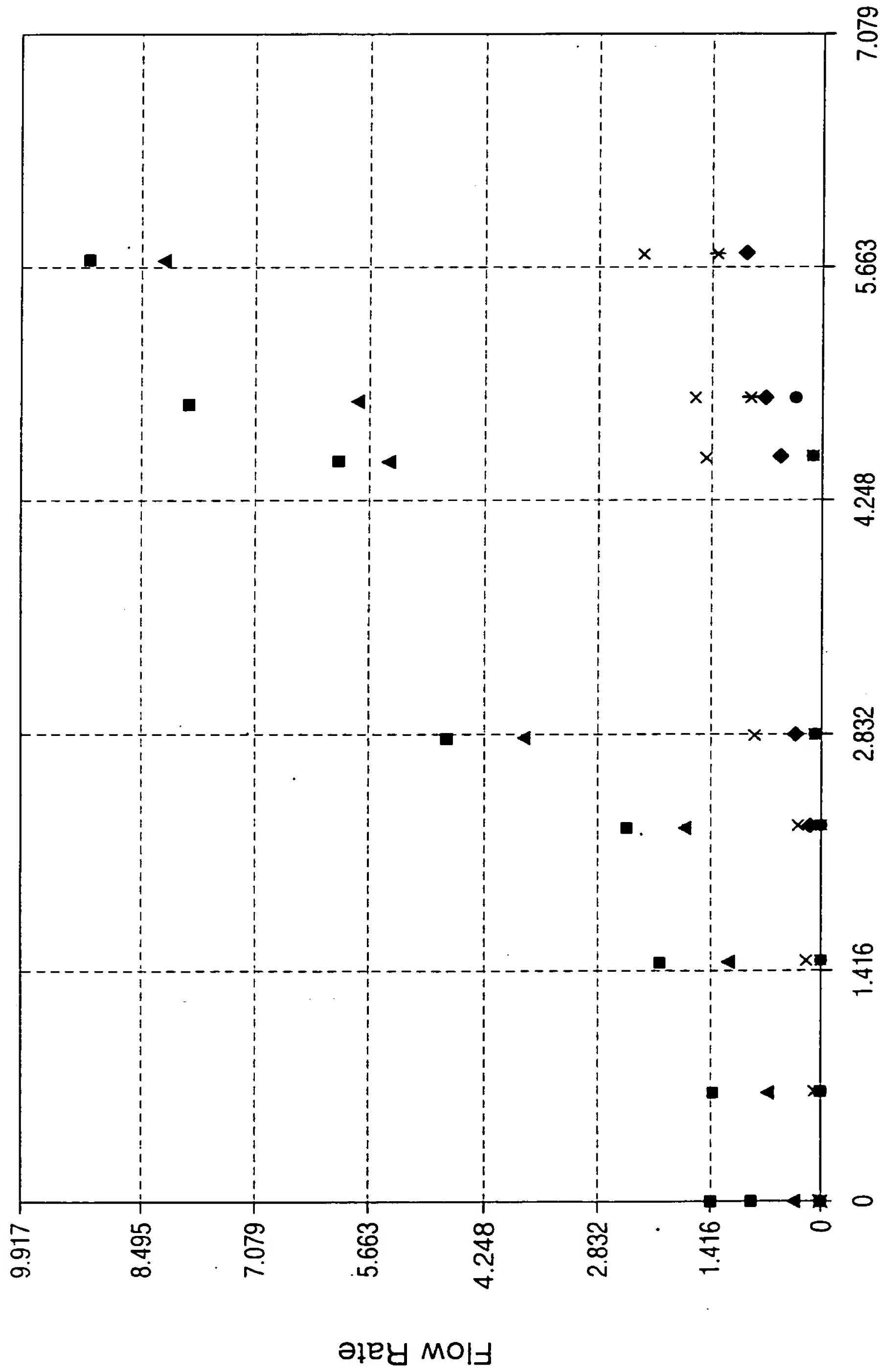


FIG. 154



Flow Rate (m³/hr) vs. Propane Injection Rate (m³/hr)



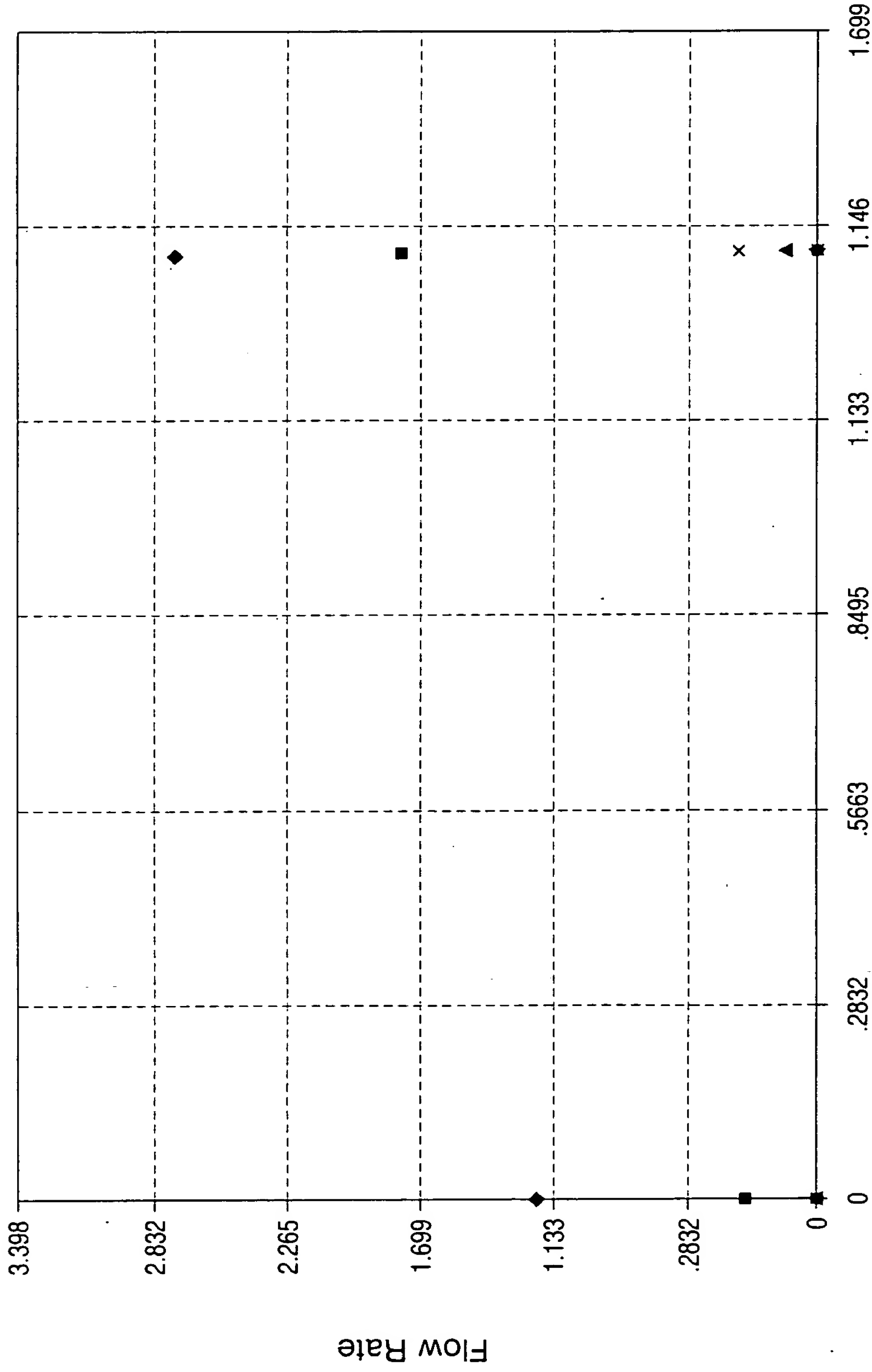
Propane Injection Rate (m³/hr)

■ 3960    ▲ 3962    ◆ 3964    × 3966    ● 3969

FIG. 155



Flow Rate (m³/hr)



Butane Injection Rate (m³/hr)

■ 3970    ▲ 3972    ◆ 3974    × 3976    \* 3978    ● 3979

FIG. 156



3980 3982 3984 3986 3988

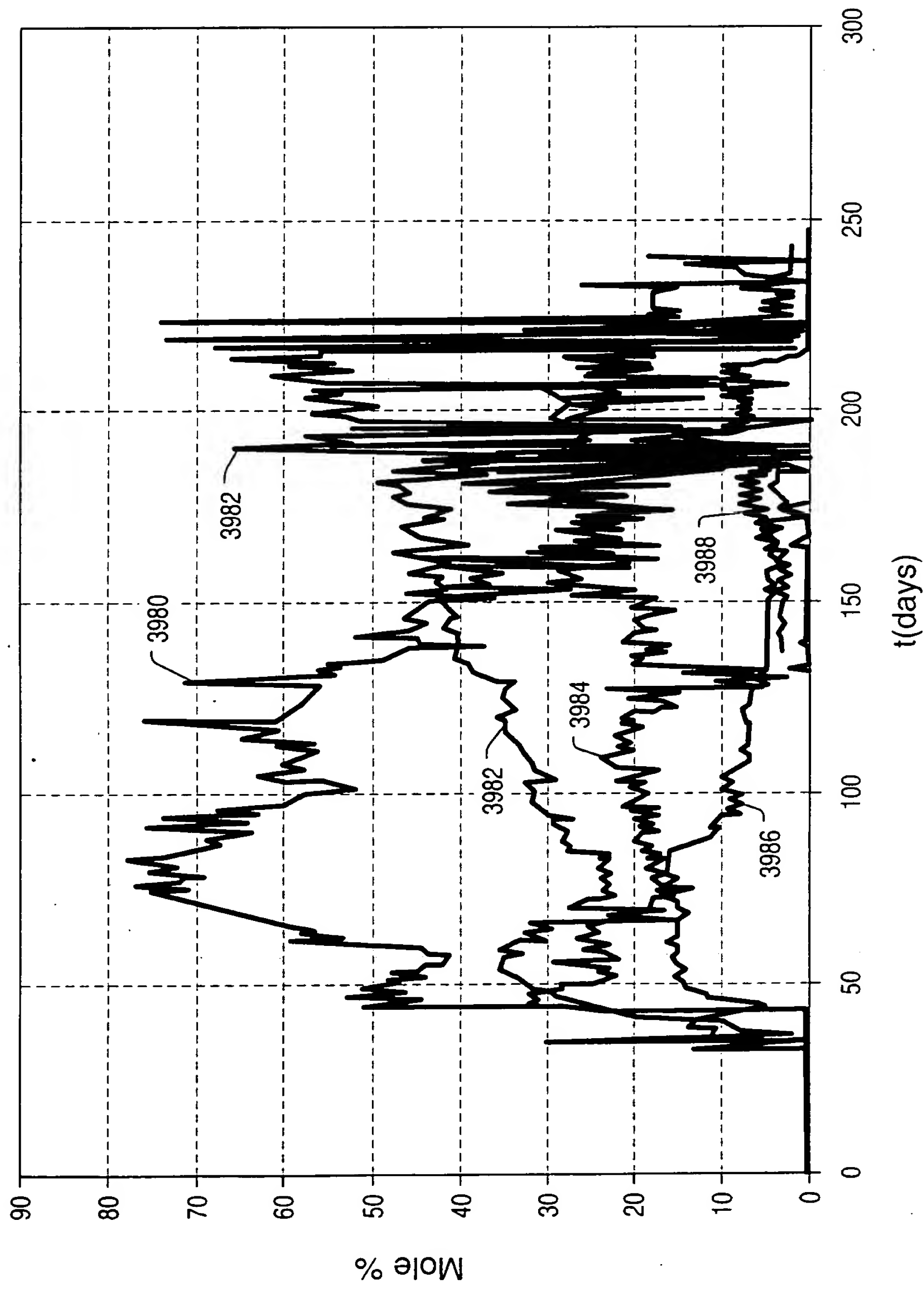


FIG. 157



Figure 158 shows the effect of time on the conversion of the reaction.

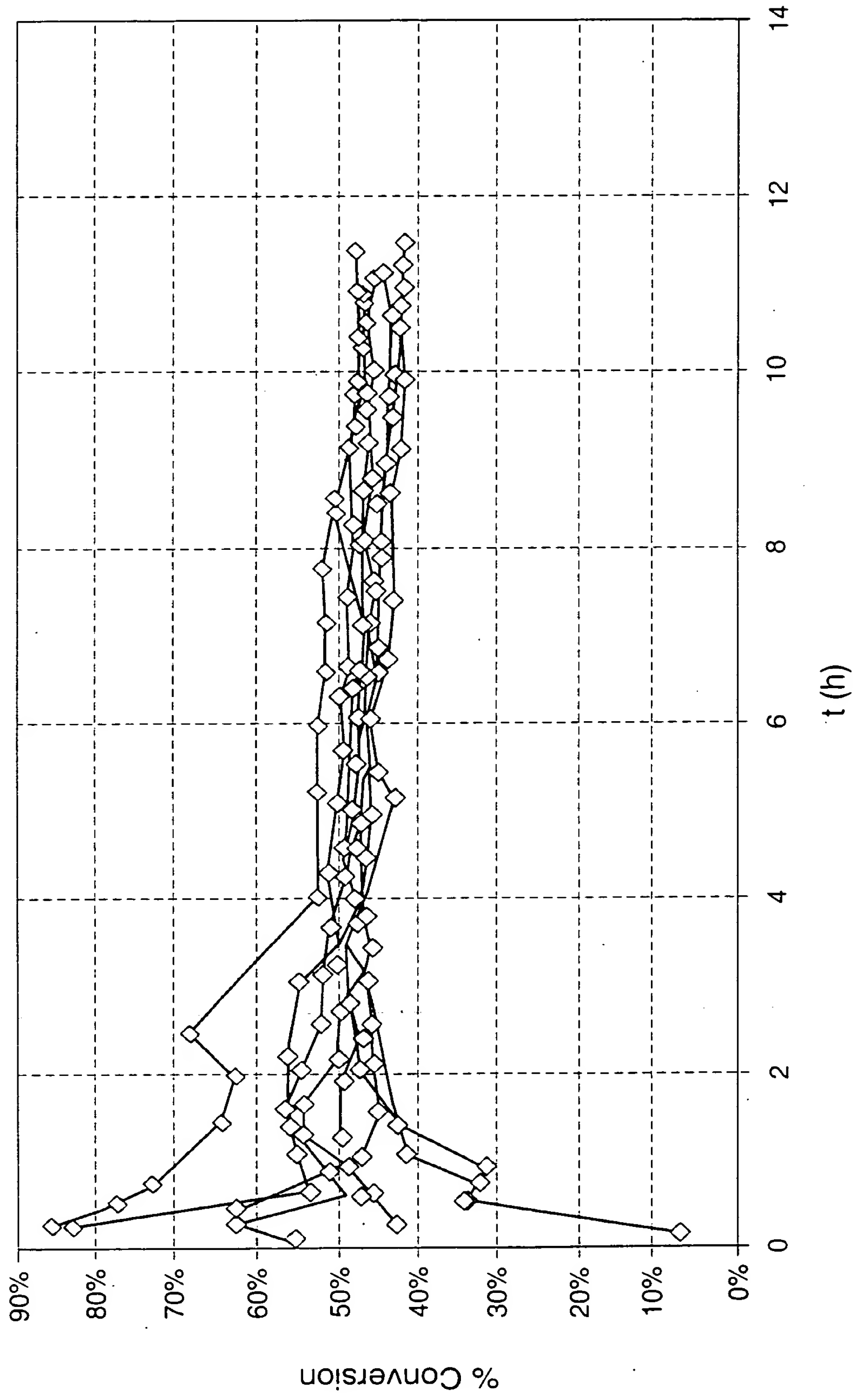


FIG. 158



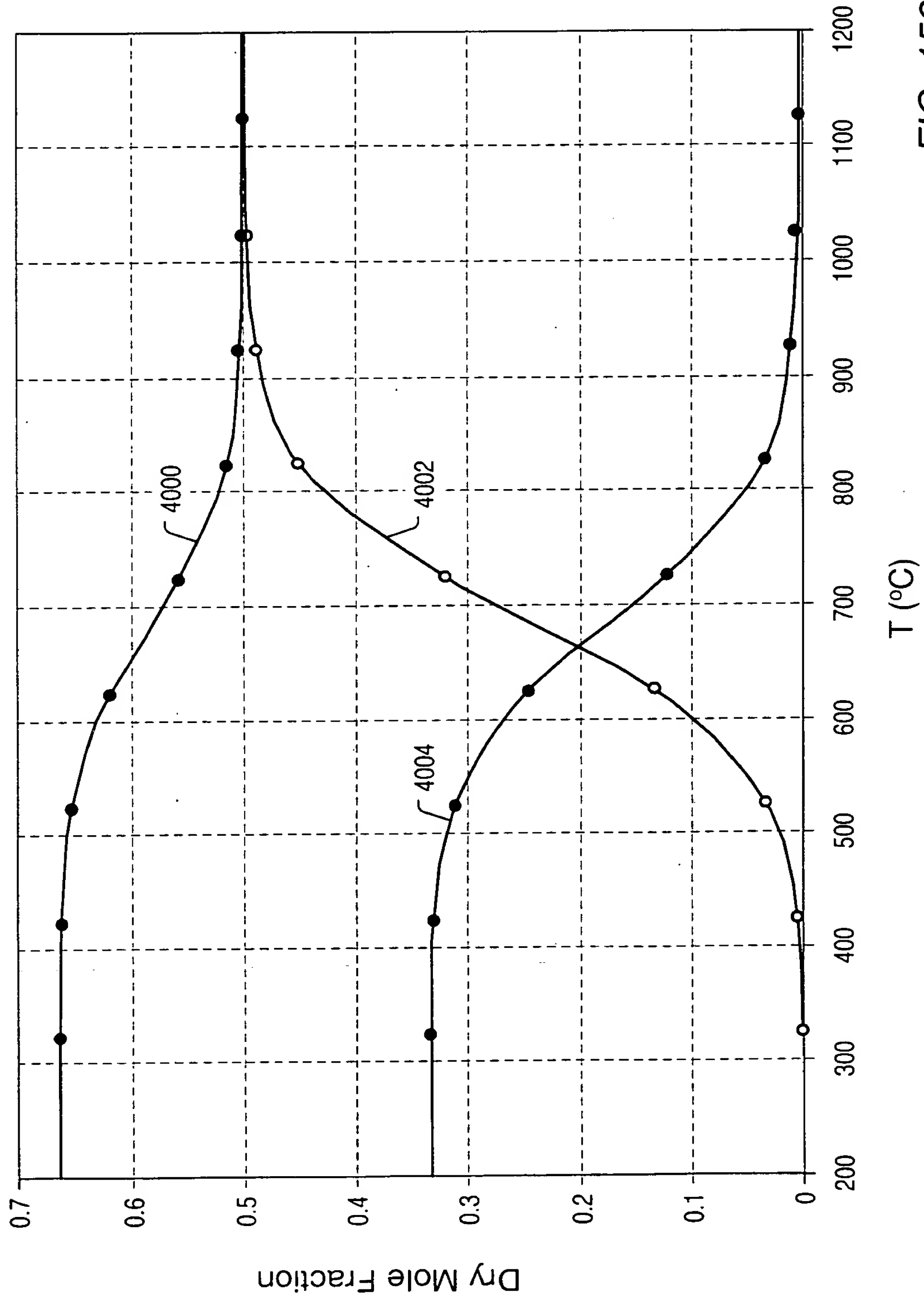


FIG. 159



Wet Mole Fraction vs. Temperature (°C) for various phases.

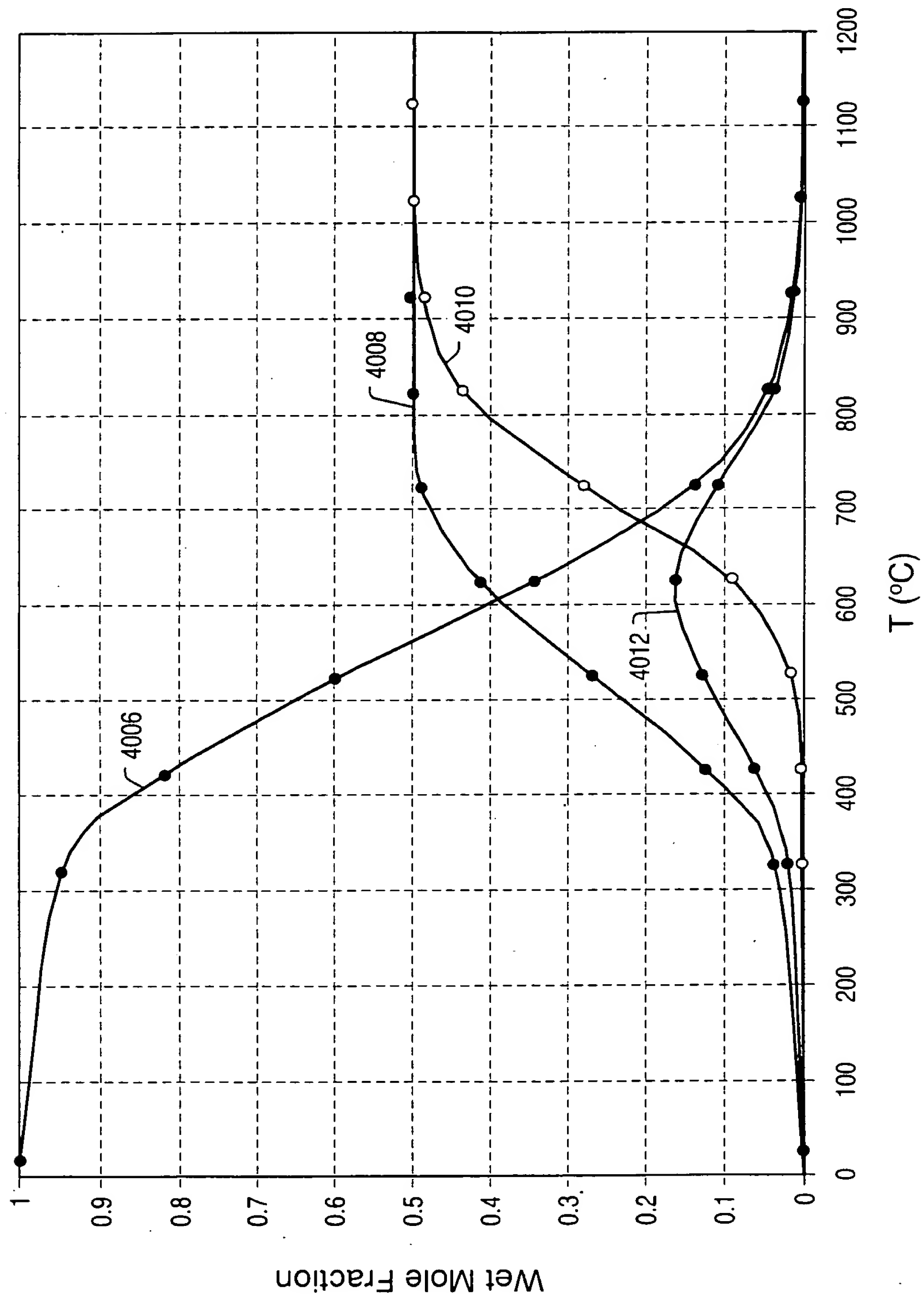


FIG. 160



FIG. 161

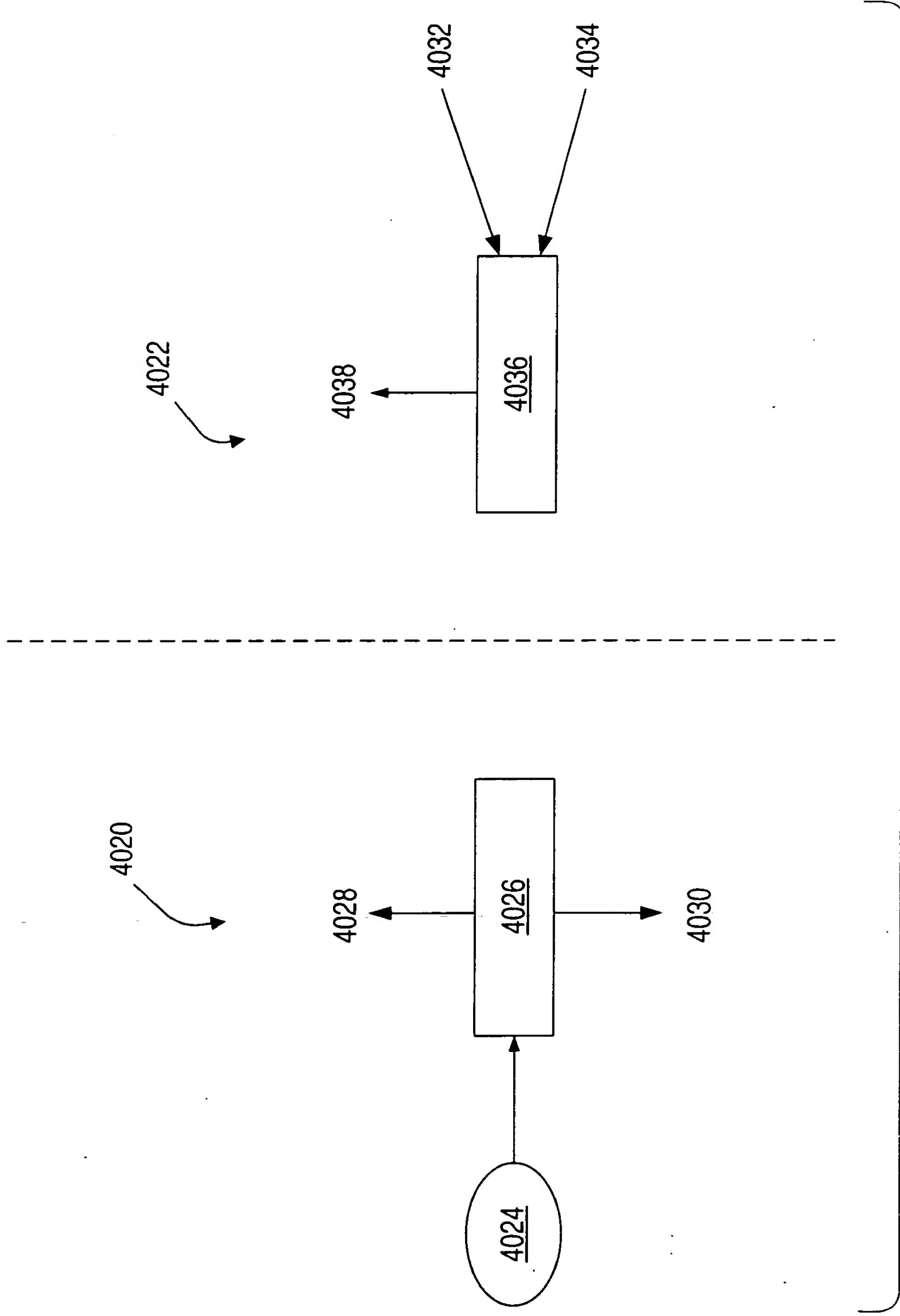


FIG. 161



FIG. 162

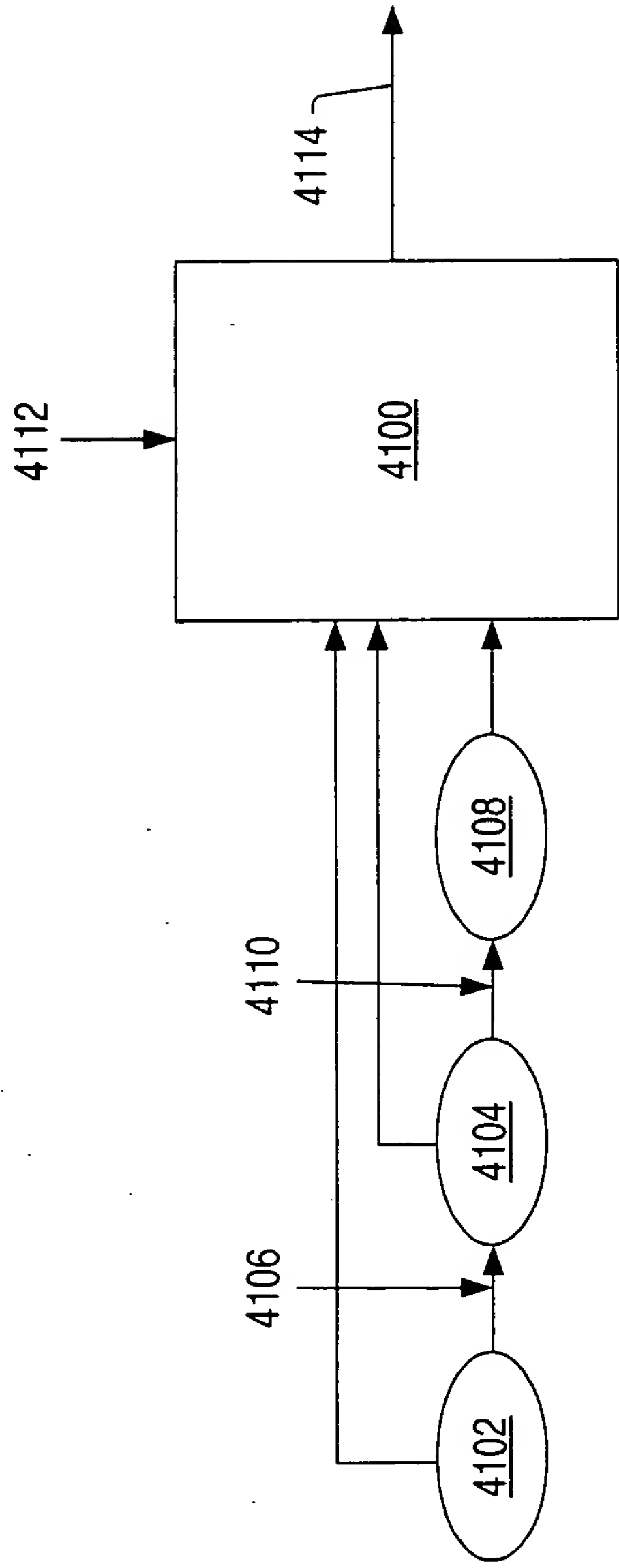


FIG. 162



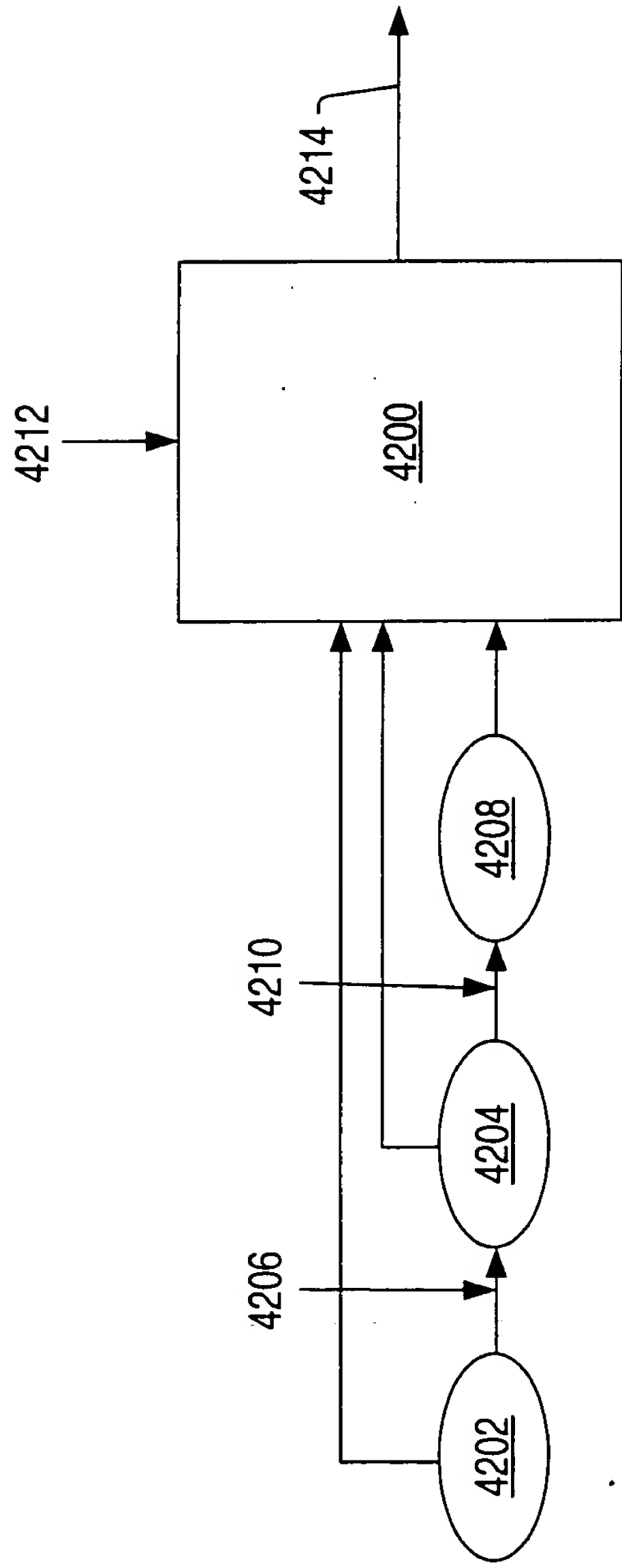


FIG. 163



FIG. 164

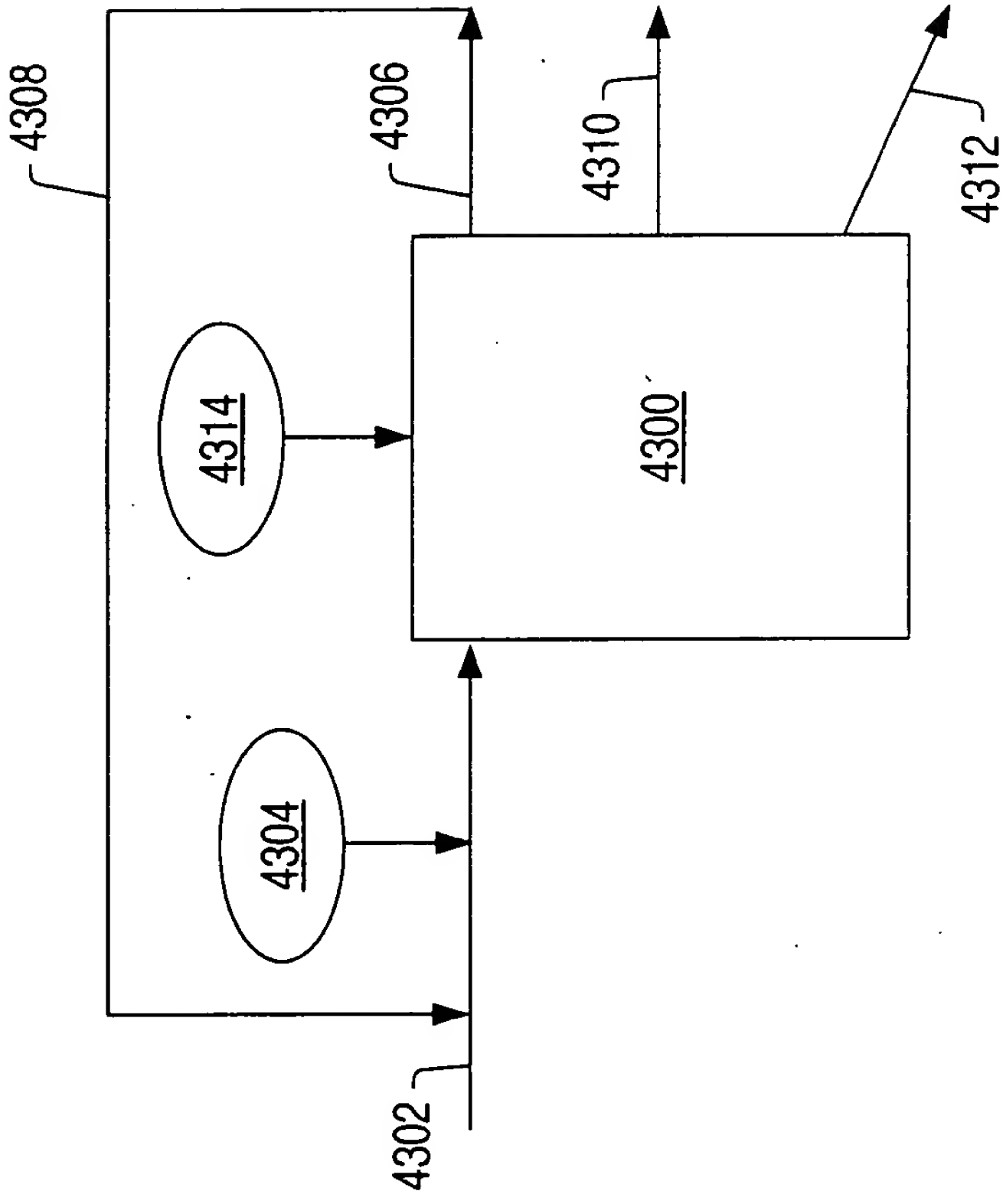
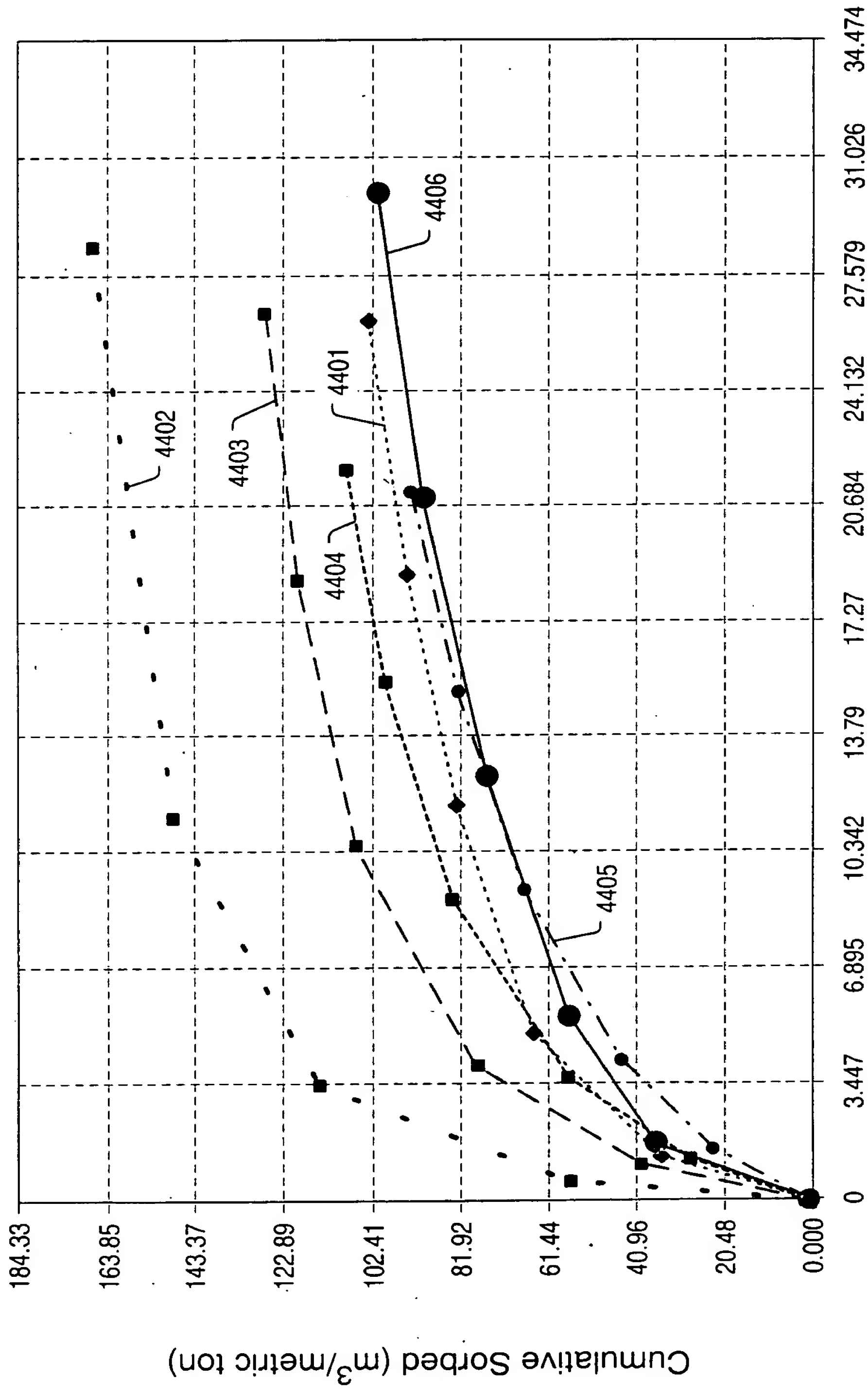


FIG. 164



184.33  
 163.85  
 143.37  
 122.89  
 102.41  
 81.92  
 61.44  
 40.96  
 20.48  
 0.000



Pressure (bars absolute)

FIG. 165



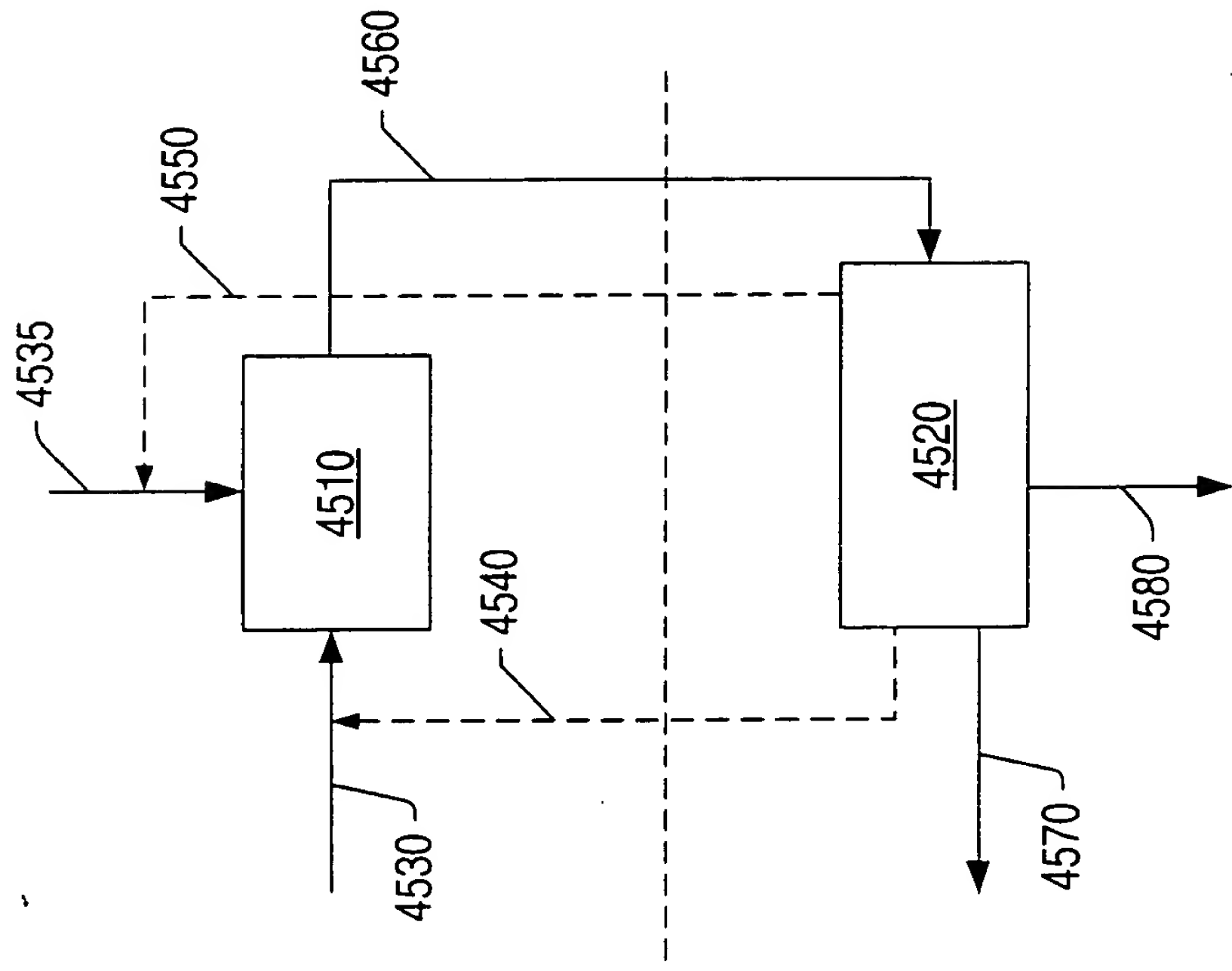


FIG. 166



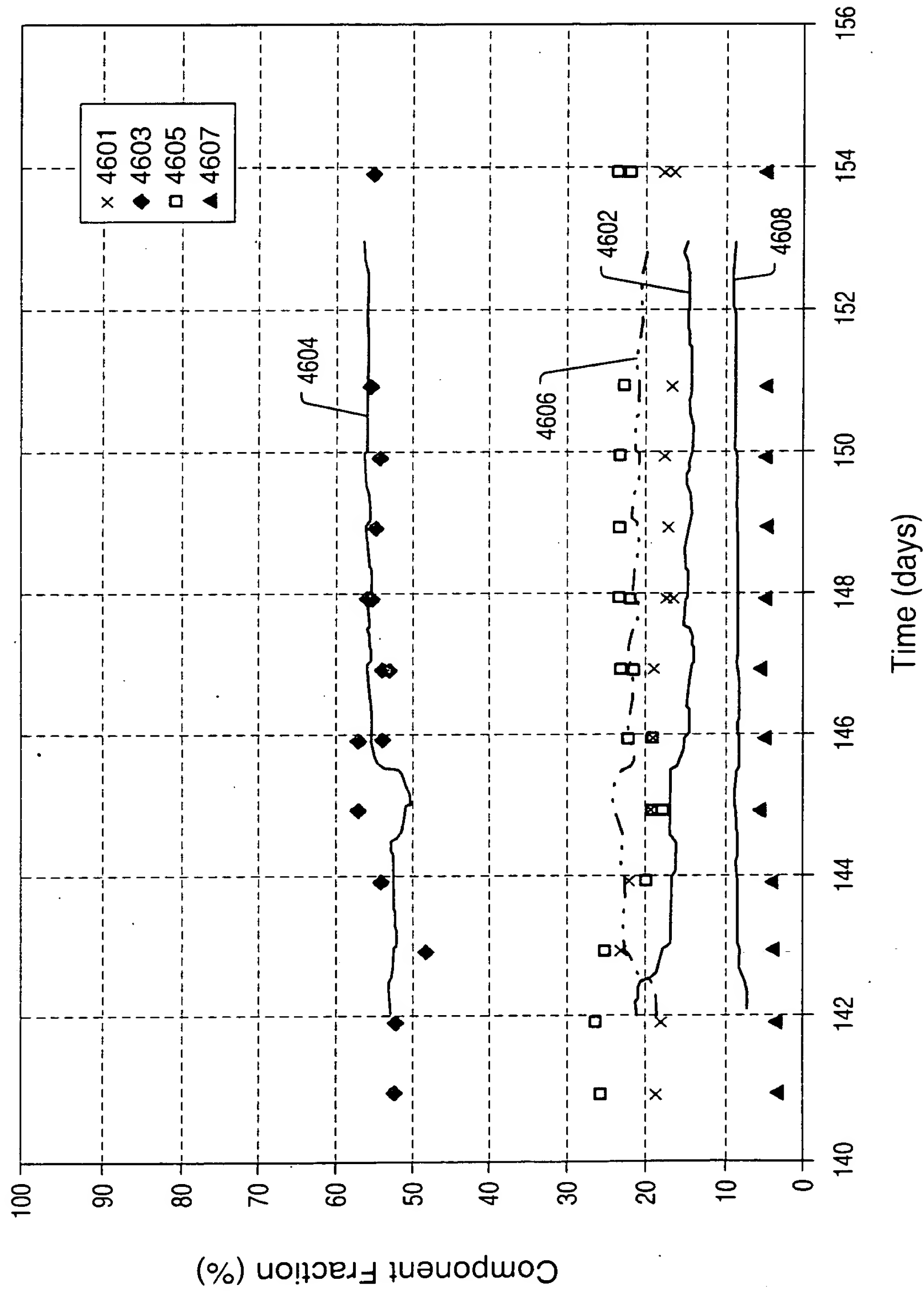
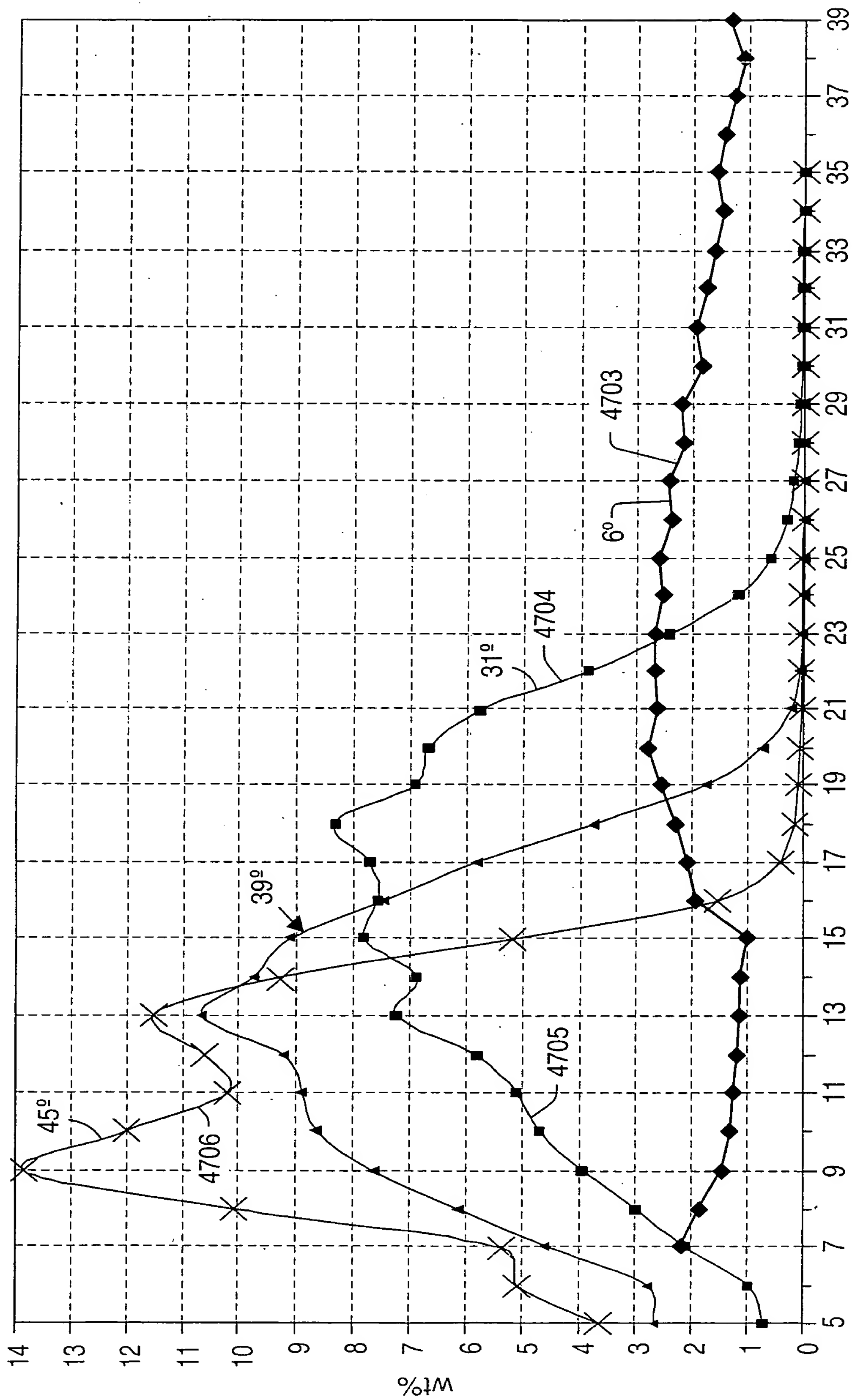


FIG. 167



14 13 12 11 10 9 8 7 6 5 4 3 2 1 0



Carbon Number

FIG. 168



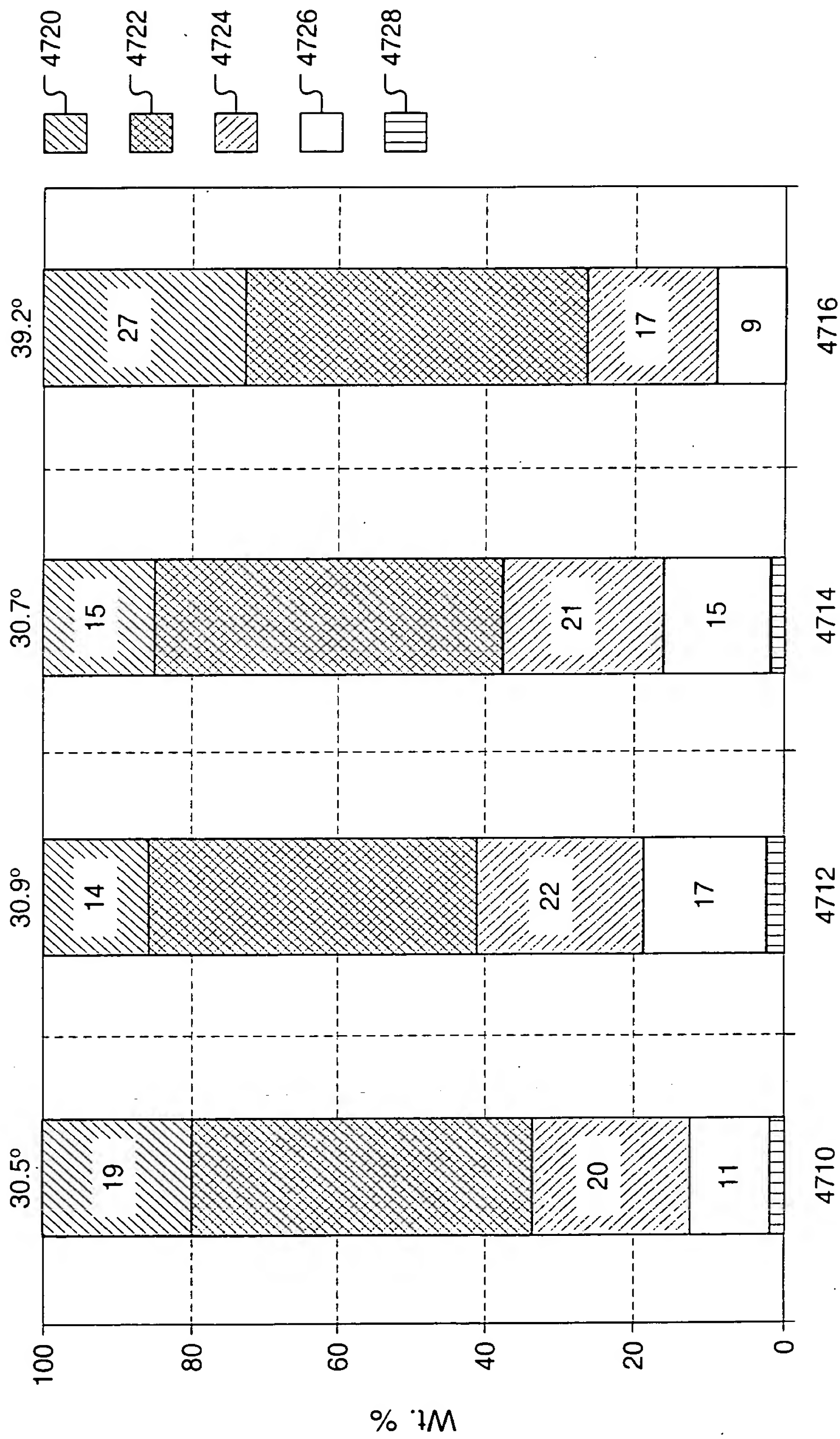
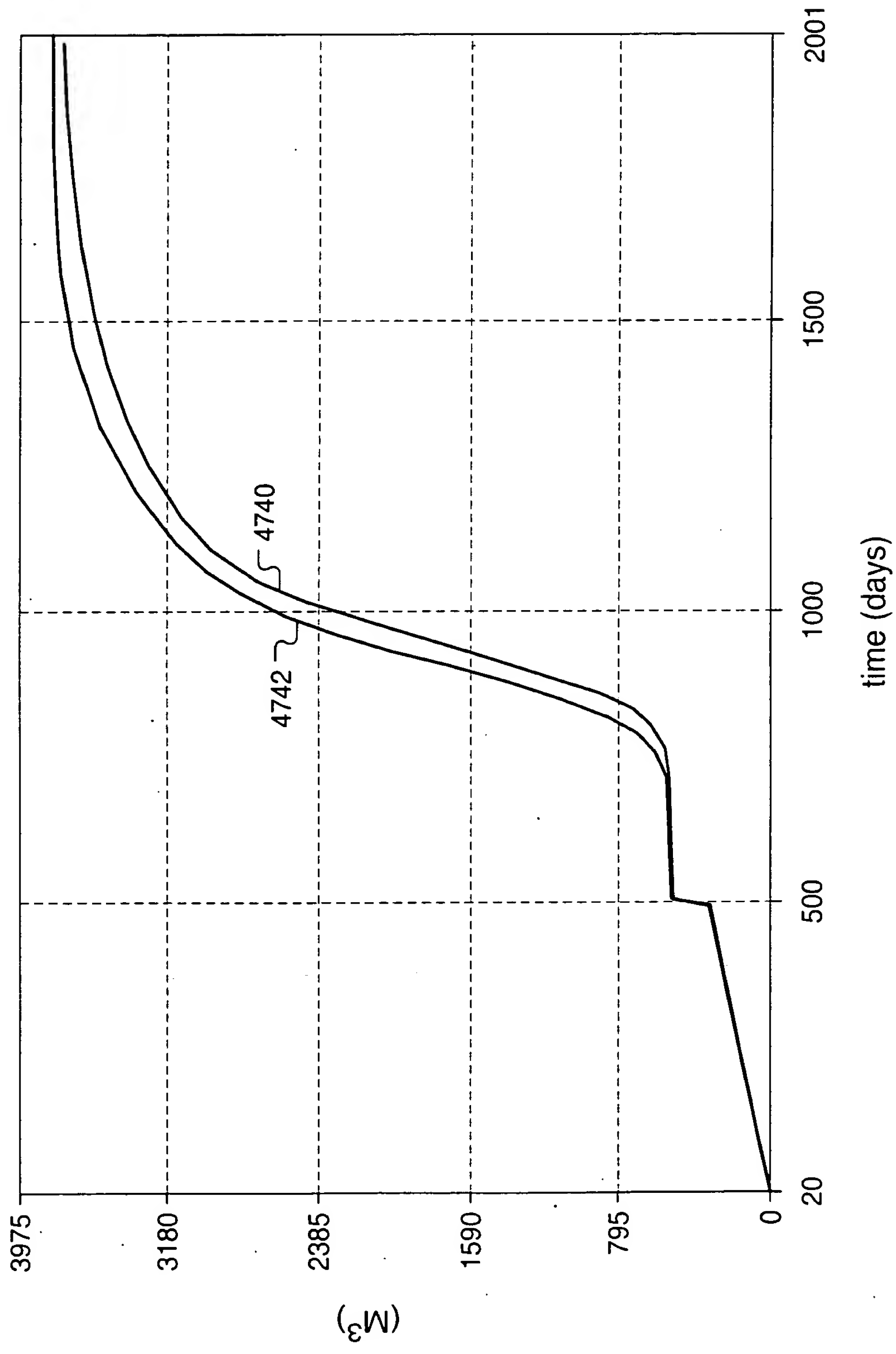


FIG. 169



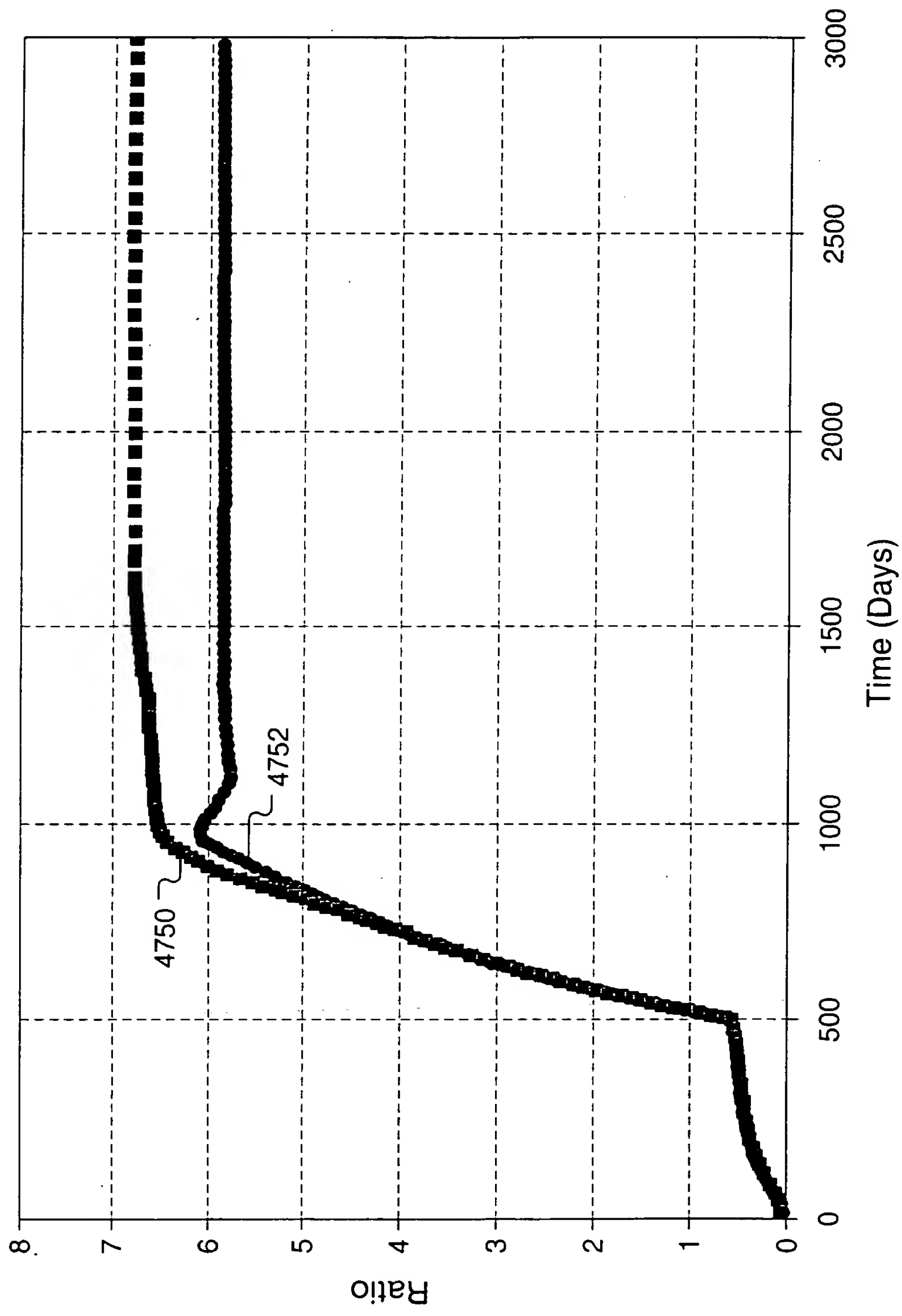
1970-1971	1972-1973	1974-1975	1976-1977	1978-1979	1980-1981	1982-1983	1984-1985	1986-1987	1988-1989	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013	2014-2015	2016-2017	2018-2019	2020-2021	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031	2032-2033	2034-2035	2036-2037	2038-2039	2040-2041	2042-2043	2044-2045	2046-2047	2048-2049	2050-2051	2052-2053	2054-2055	2056-2057	2058-2059	2060-2061	2062-2063	2064-2065	2066-2067	2068-2069	2070-2071	2072-2073	2074-2075	2076-2077	2078-2079	2080-2081	2082-2083	2084-2085	2086-2087	2088-2089	2090-2091	2092-2093	2094-2095	2096-2097	2098-2099	2100-2101	2102-2103	2104-2105	2106-2107	2108-2109	2110-2111	2112-2113	2114-2115	2116-2117	2118-2119	2120-2121	2122-2123	2124-2125	2126-2127	2128-2129	2130-2131	2132-2133	2134-2135	2136-2137	2138-2139	2140-2141	2142-2143	2144-2145	2146-2147	2148-2149	2150-2151	2152-2153	2154-2155	2156-2157	2158-2159	2160-2161	2162-2163	2164-2165	2166-2167	2168-2169	2170-2171	2172-2173	2174-2175	2176-2177	2178-2179	2180-2181	2182-2183	2184-2185	2186-2187	2188-2189	2190-2191	2192-2193	2194-2195	2196-2197	2198-2199	2200-2201	2202-2203	2204-2205	2206-2207	2208-2209	2210-2211	2212-2213	2214-2215	2216-2217	2218-2219	2220-2221	2222-2223	2224-2225	2226-2227	2228-2229	2230-2231	2232-2233	2234-2235	2236-2237	2238-2239	2240-2241	2242-2243	2244-2245	2246-2247	2248-2249	2250-2251	2252-2253	2254-2255	2256-2257	2258-2259	2260-2261	2262-2263	2264-2265	2266-2267	2268-2269	2270-2271	2272-2273	2274-2275	2276-2277	2278-2279	2280-2281	2282-2283	2284-2285	2286-2287	2288-2289	2290-2291	2292-2293	2294-2295	2296-2297	2298-2299	2300-2301	2302-2303	2304-2305	2306-2307	2308-2309	2310-2311	2312-2313	2314-2315	2316-2317	2318-2319	2320-2321	2322-2323	2324-2325	2326-2327	2328-2329	2330-2331	2332-2333	2334-2335	2336-2337	2338-2339	2340-2341	2342-2343	2344-2345	2346-2347	2348-2349	2350-2351	2352-2353	2354-2355	2356-2357	2358-2359	2360-2361	2362-2363	2364-2365	2366-2367	2368-2369	2370-2371	2372-2373	2374-2375	2376-2377	2378-2379	2380-2381	2382-2383	2384-2385	2386-2387	2388-2389	2390-2391	2392-2393	2394-2395	2396-2397	2398-2399	2400-2401	2402-2403	2404-2405	2406-2407	2408-2409	2410-2411	2412-2413	2414-2415	2416-2417	2418-2419	2420-2421	2422-2423	2424-2425	2426-2427	2428-2429	2430-2431	2432-2433	2434-2435	2436-2437	2438-2439	2440-2441	2442-2443	2444-2445	2446-2447	2448-2449	2450-2451	2452-2453	2454-2455	2456-2457	2458-2459	2460-2461	2462-2463	2464-2465	2466-2467	2468-2469	2470-2471	2472-2473	2474-2475	2476-2477	2478-2479	2480-2481	2482-2483	2484-2485	2486-2487	2488-2489	2490-2491	2492-2493	2494-2495	2496-2497	2498-2499	2500-2501	2502-2503	2504-2505	2506-2507	2508-2509	2510-2511	2512-2513	2514-
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**FIG. 170**



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 2154-2155  
 2155-2156  
 2156-2157  
 2157-2158  
 2158-2159  
 2159-2160  
 2160-2161  
 2161-2162  
 216



**FIG. 171**



1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385</
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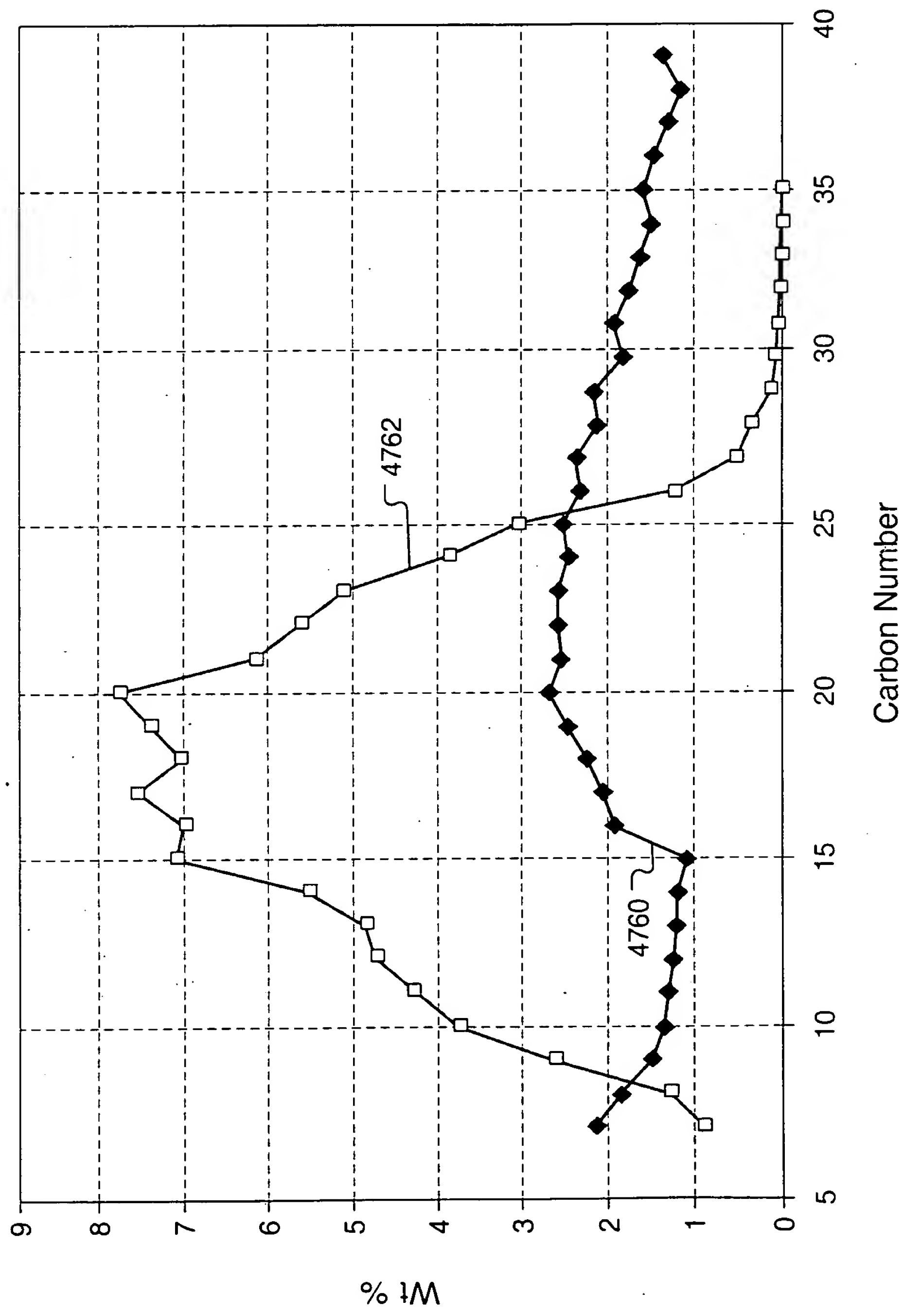


FIG. 172



1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378</
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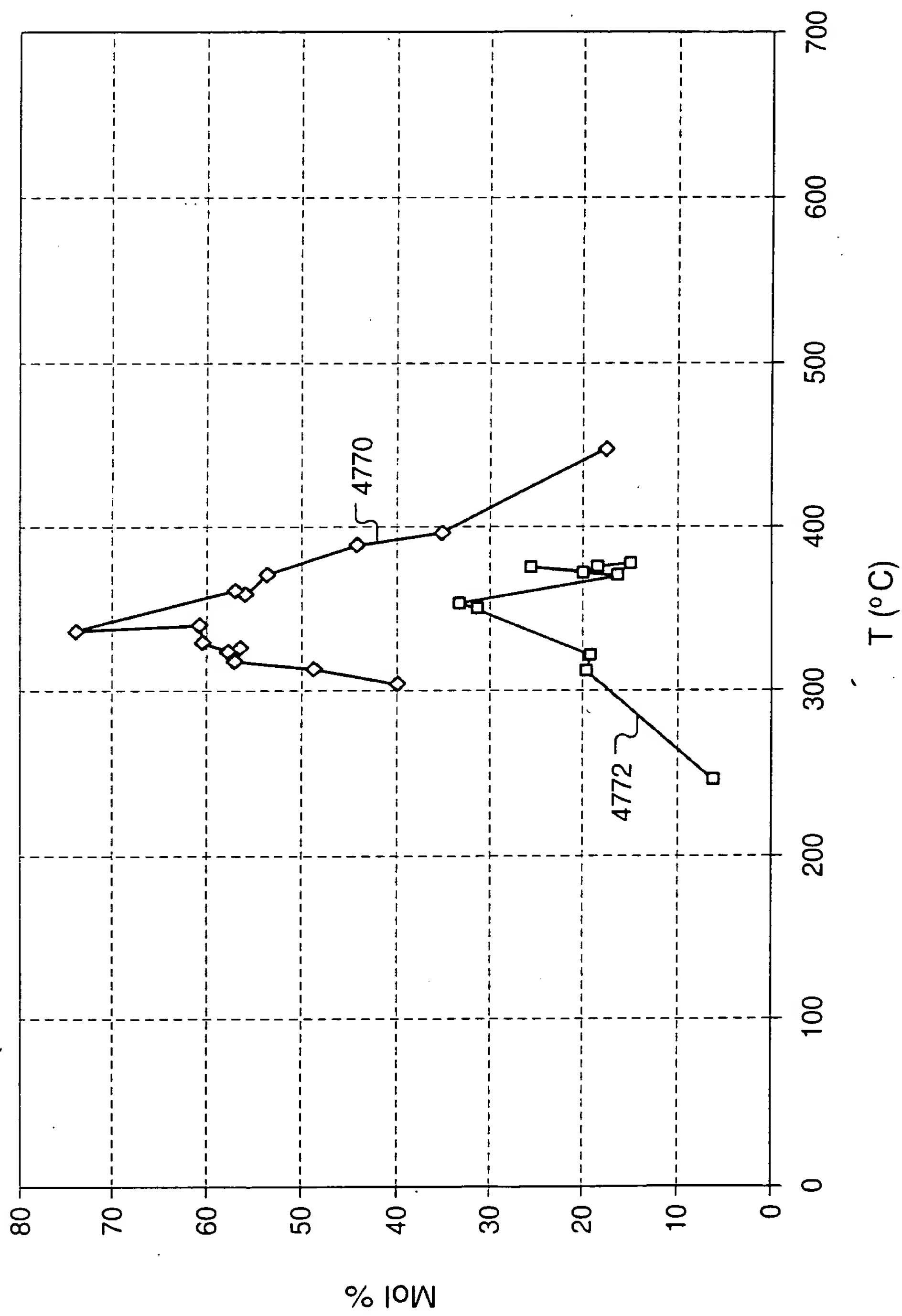


FIG. 173



Figure 174 shows the variation of API with temperature (T) for a sample. The graph plots API (Y-axis, 0 to 60) against T (°C) (X-axis, 0 to 700). The data points are connected by a line, showing a sharp increase in API around 300°C, peaking at approximately 55 API at 350°C, and then decreasing to about 20 API at 450°C. The peak is labeled 4782 and the subsequent decrease is labeled 4780.

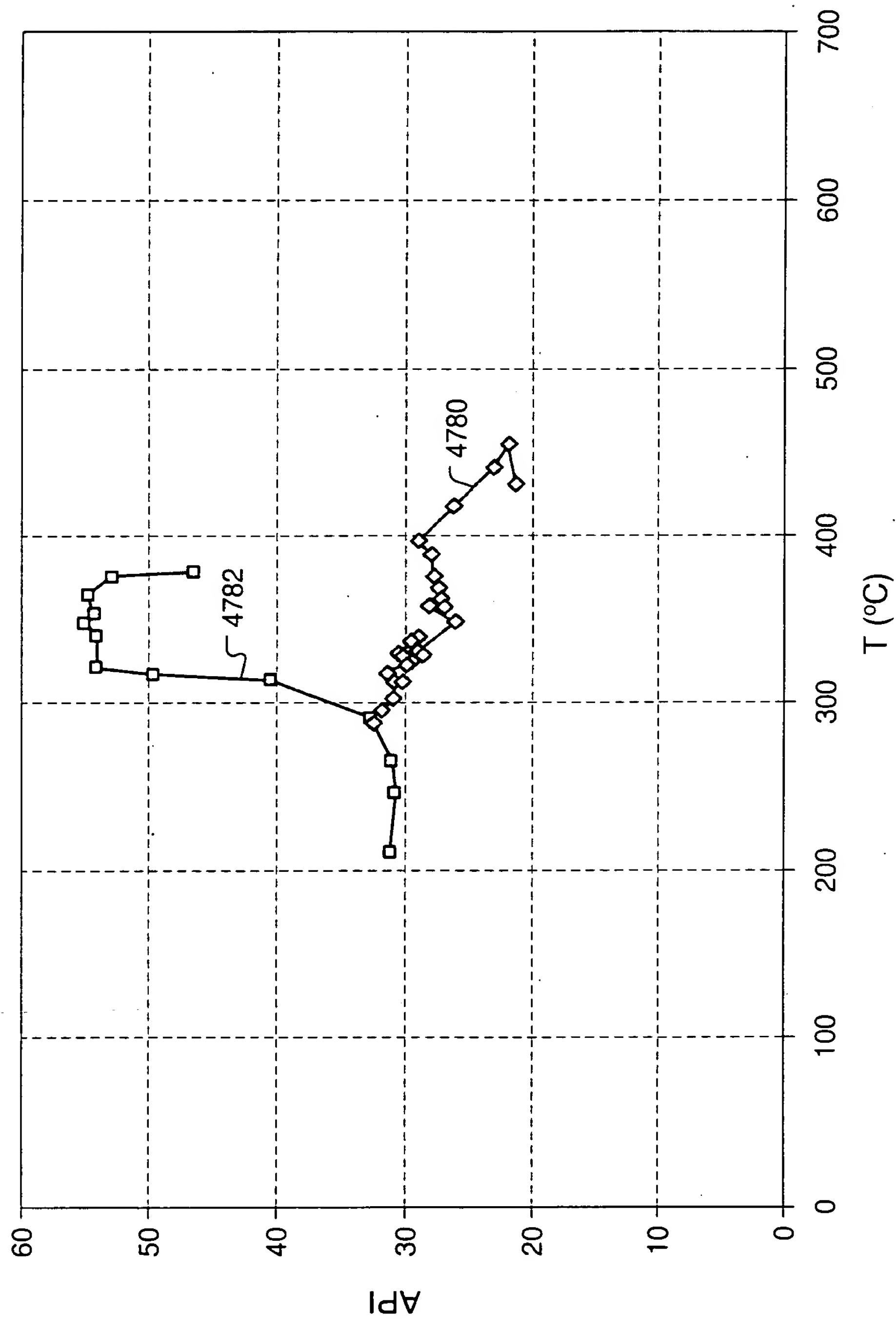
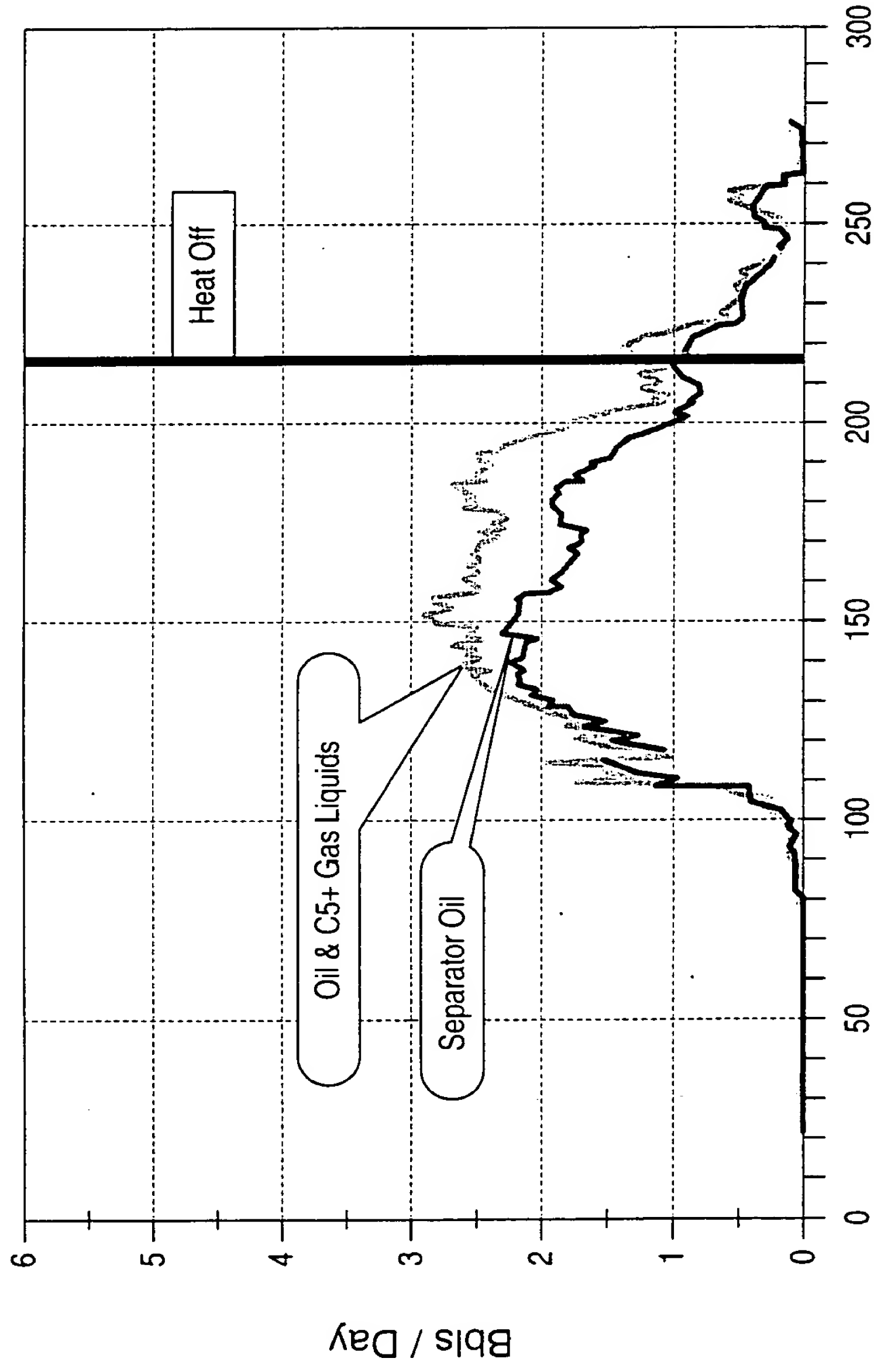


FIG. 174



FIG. 175



Days From Start of Heat Injection

FIG. 175



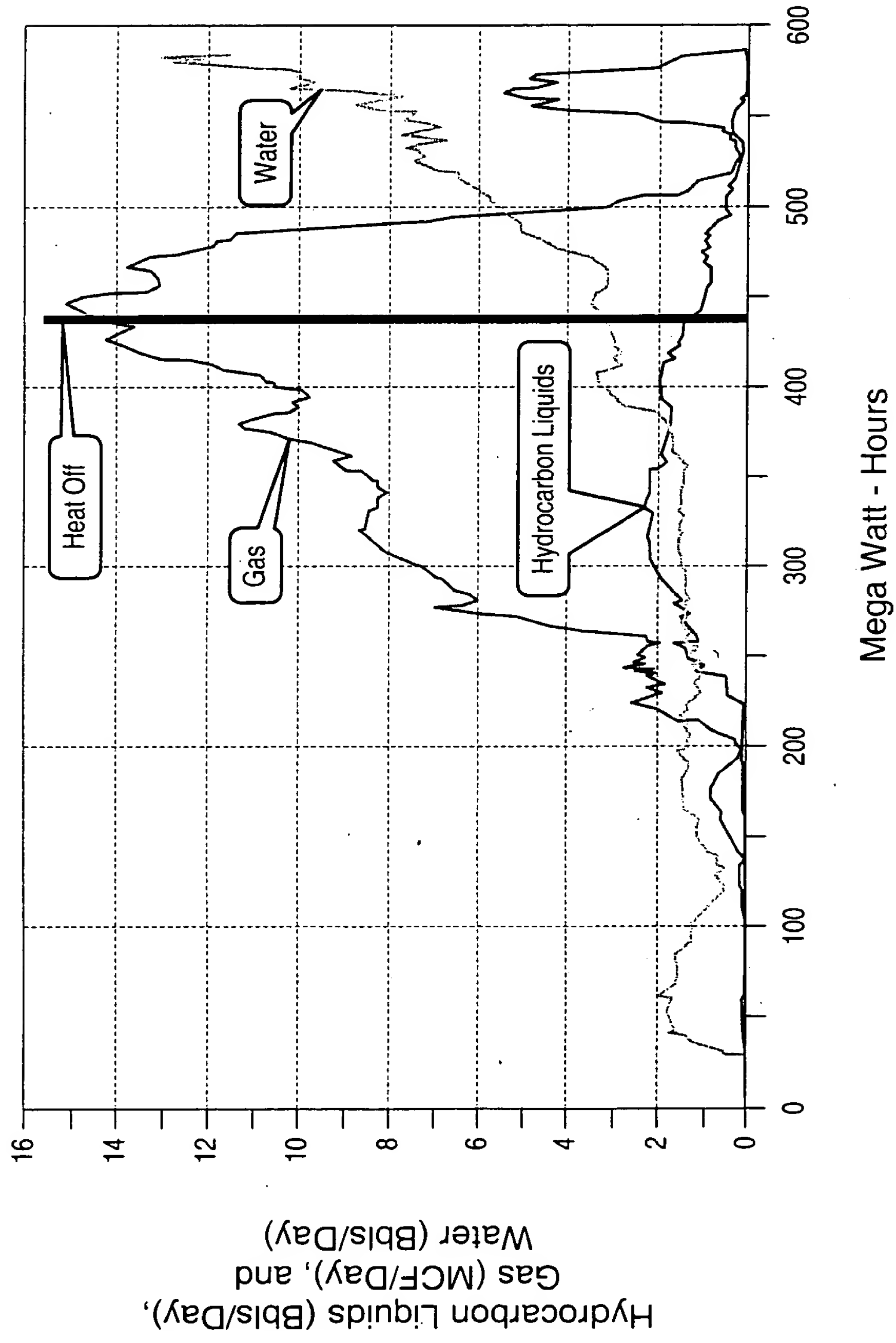
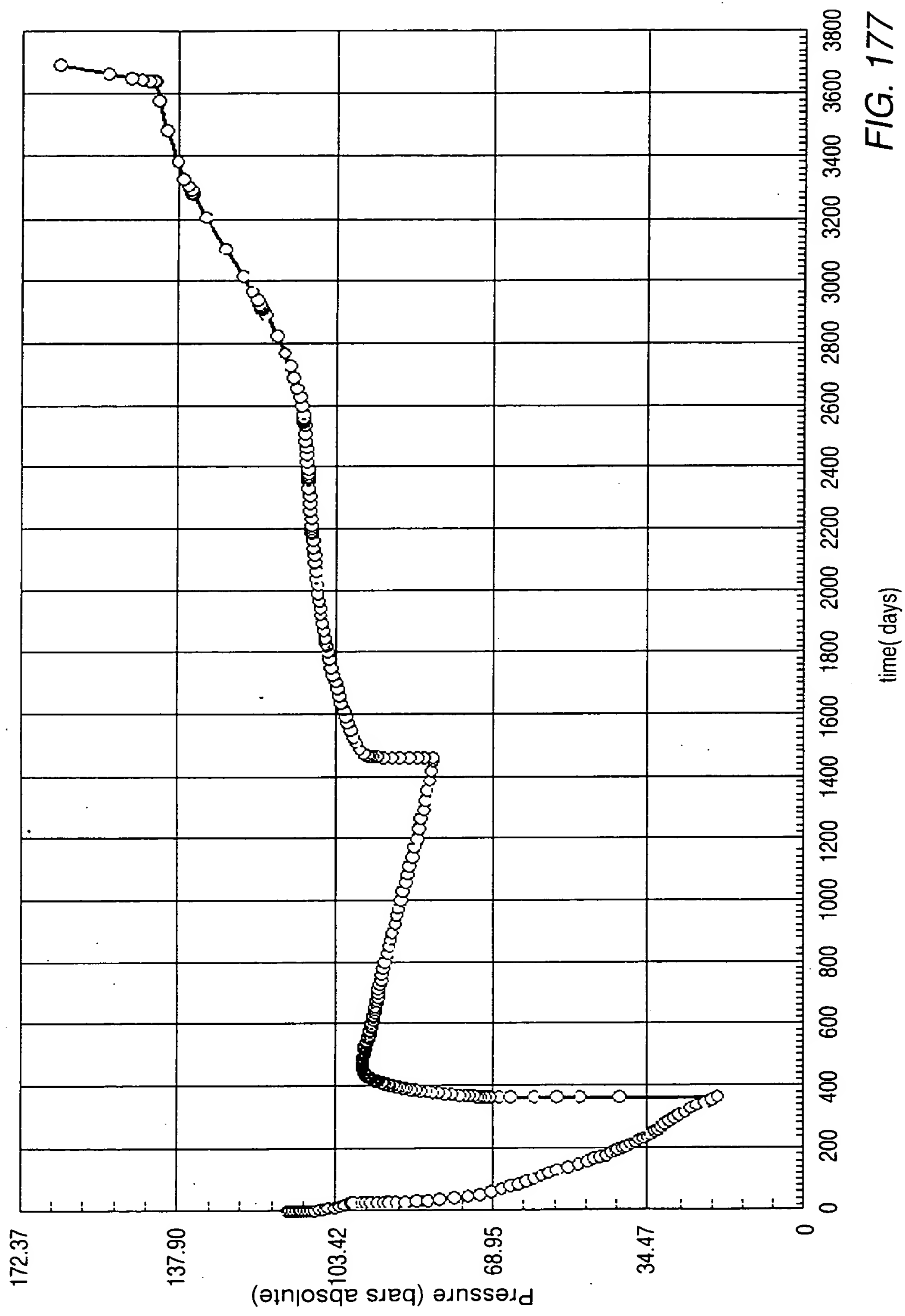


FIG. 176



[illegible]



0 200 400 600 800 1000 1200 1400 1600 1800 2000 2200 2400 2600 2800 3000 3200 3400 3600 3800

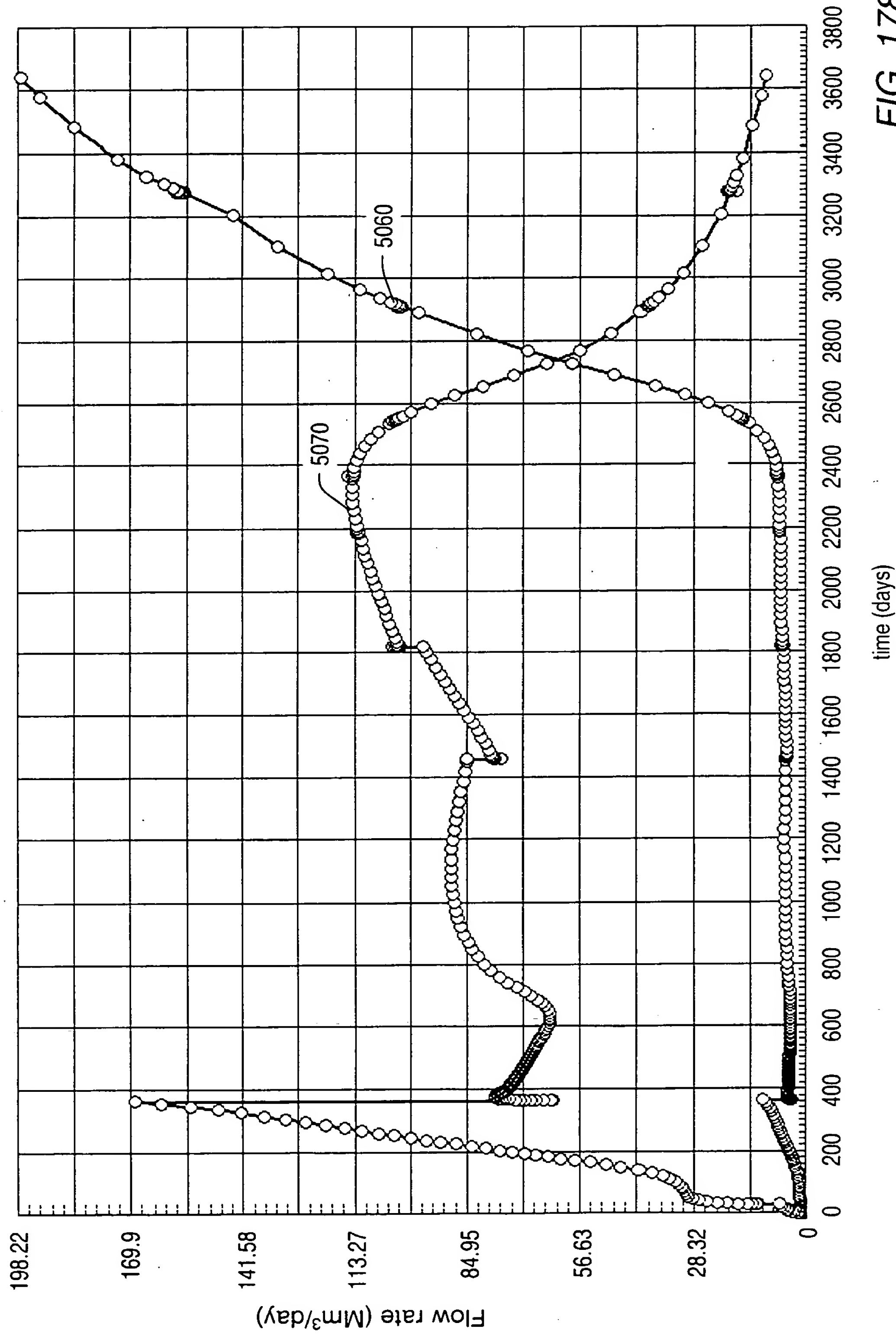


FIG. 178



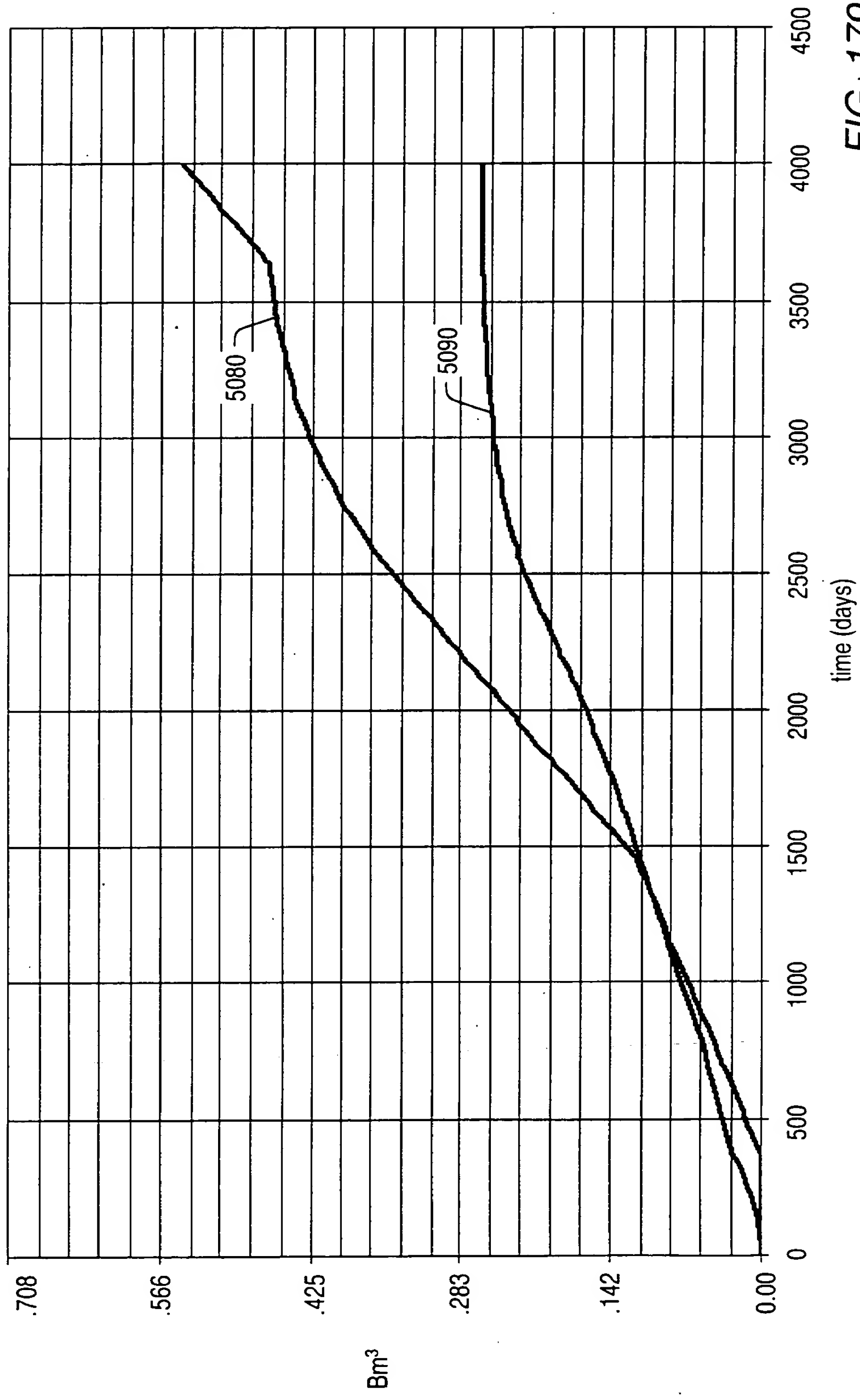
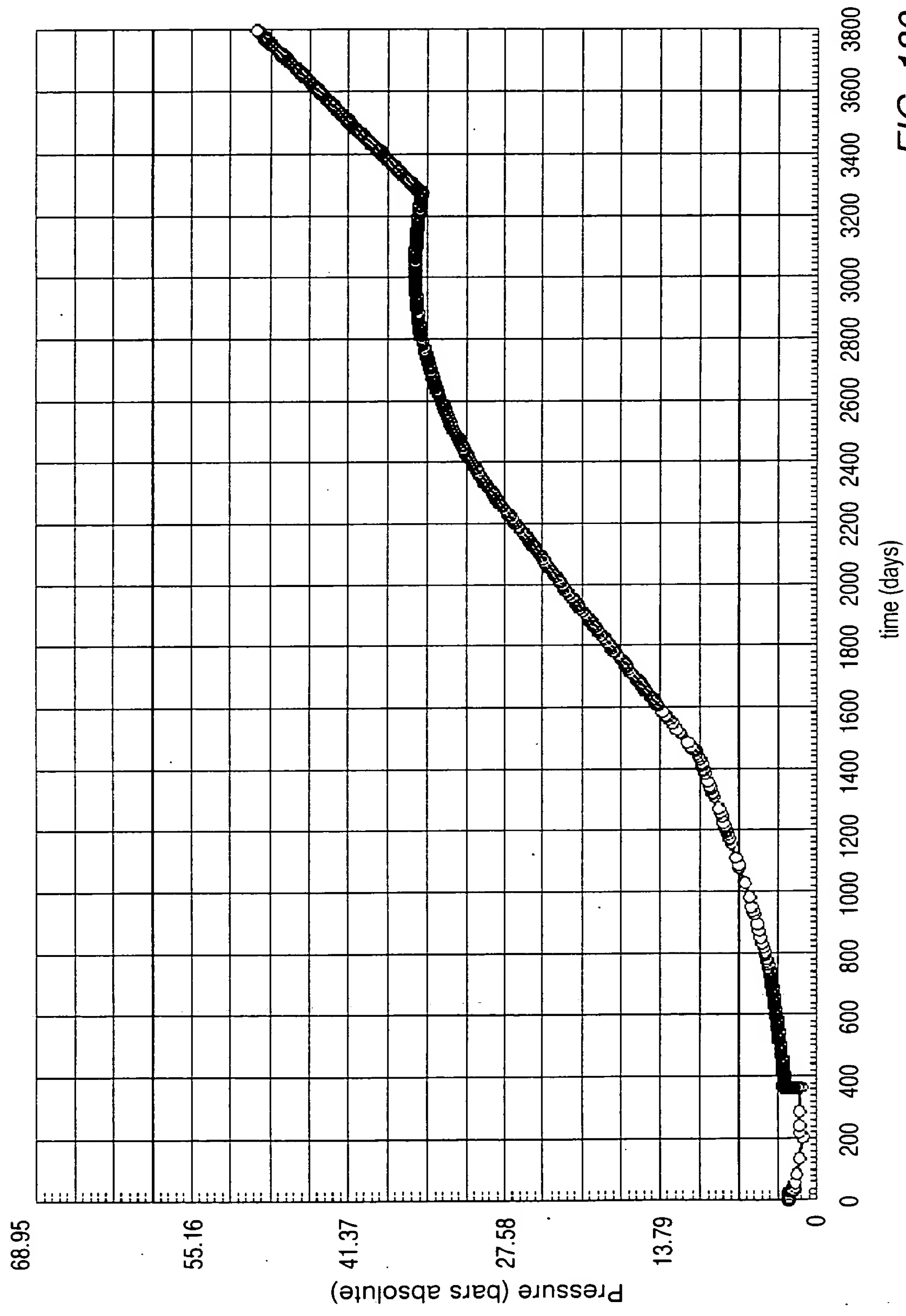
[illegible]

FIG. 179



1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385</
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**FIG. 180**



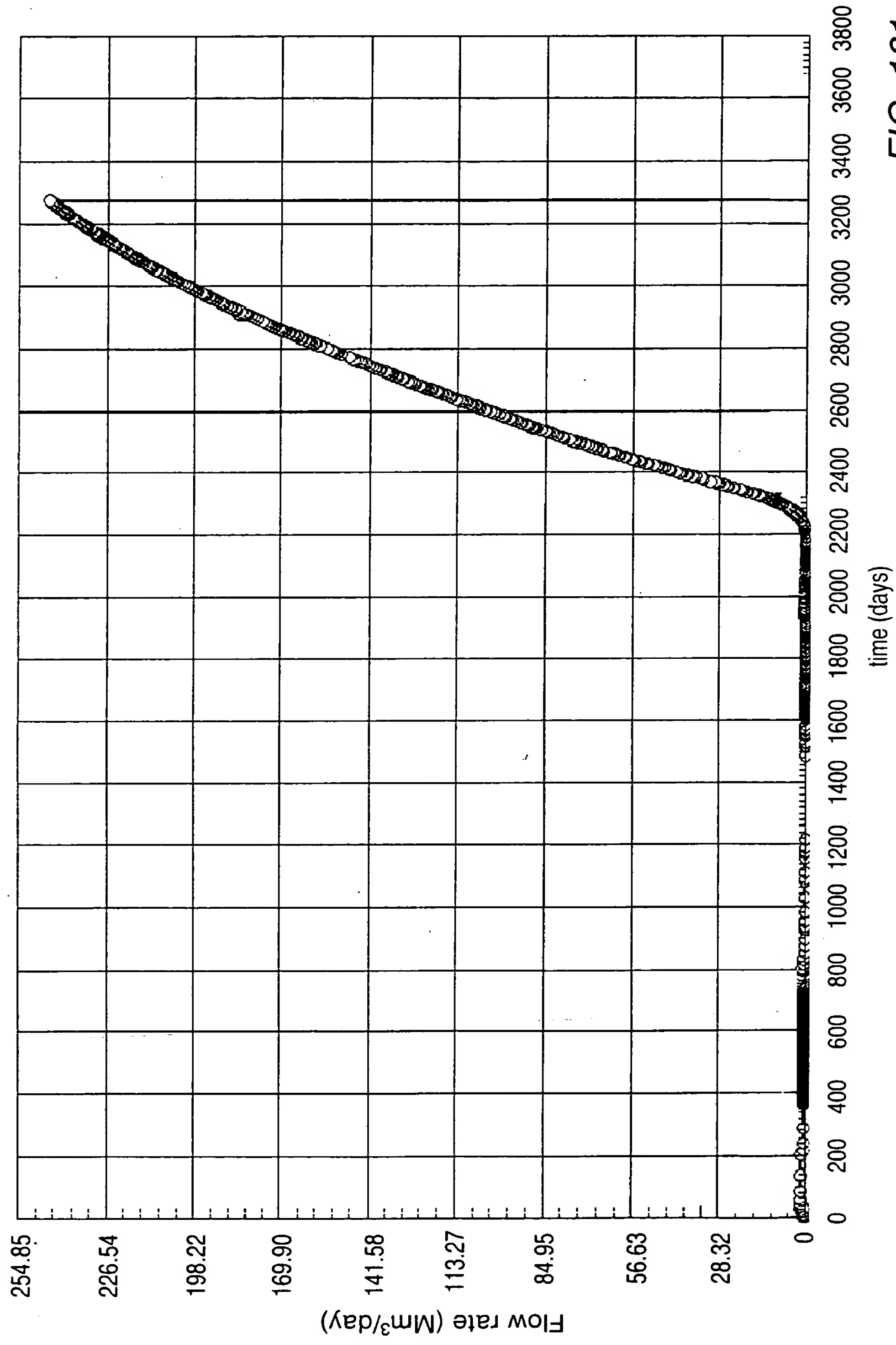


FIG. 181



The graph illustrates the dynamics of a 1000m³ tank over 4500 days. The y-axis represents  $Bm^3$  with major ticks at 0, 142, 283, 425, 566, and 708. The x-axis represents time in days with major ticks every 500 days from 0 to 4500. The curve begins at the origin (0,0) and increases steadily, crossing the 142  $Bm^3$  mark at approximately day 1000 and the 283  $Bm^3$  mark at approximately day 2000. It reaches its maximum value of about 566  $Bm^3$  at day 1500. Following this peak, the value decreases sharply, crossing the 283  $Bm^3$  mark again at day 2500. From day 2500 onwards, the curve levels off, approaching a steady state of approximately 142  $Bm^3$  by day 4000.

time (days)	$Bm^3$
0	0
500	~71
1000	~142
1500	~566
2000	~283
2500	~283
3000	~142
3500	~142
4000	~142
4500	~142

FIG. 182



FIG. 76a

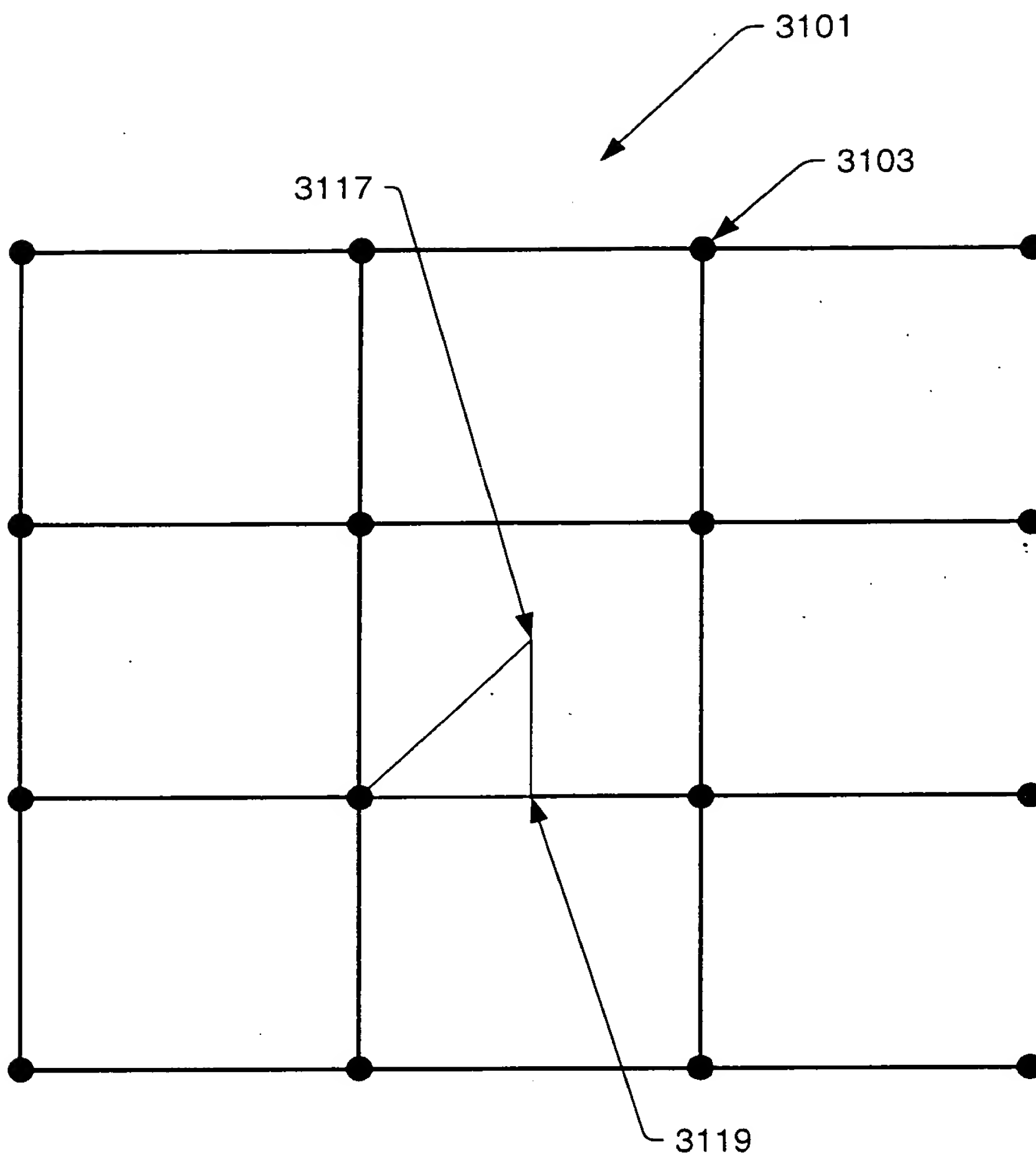


FIG. 76a



FIG. 81a

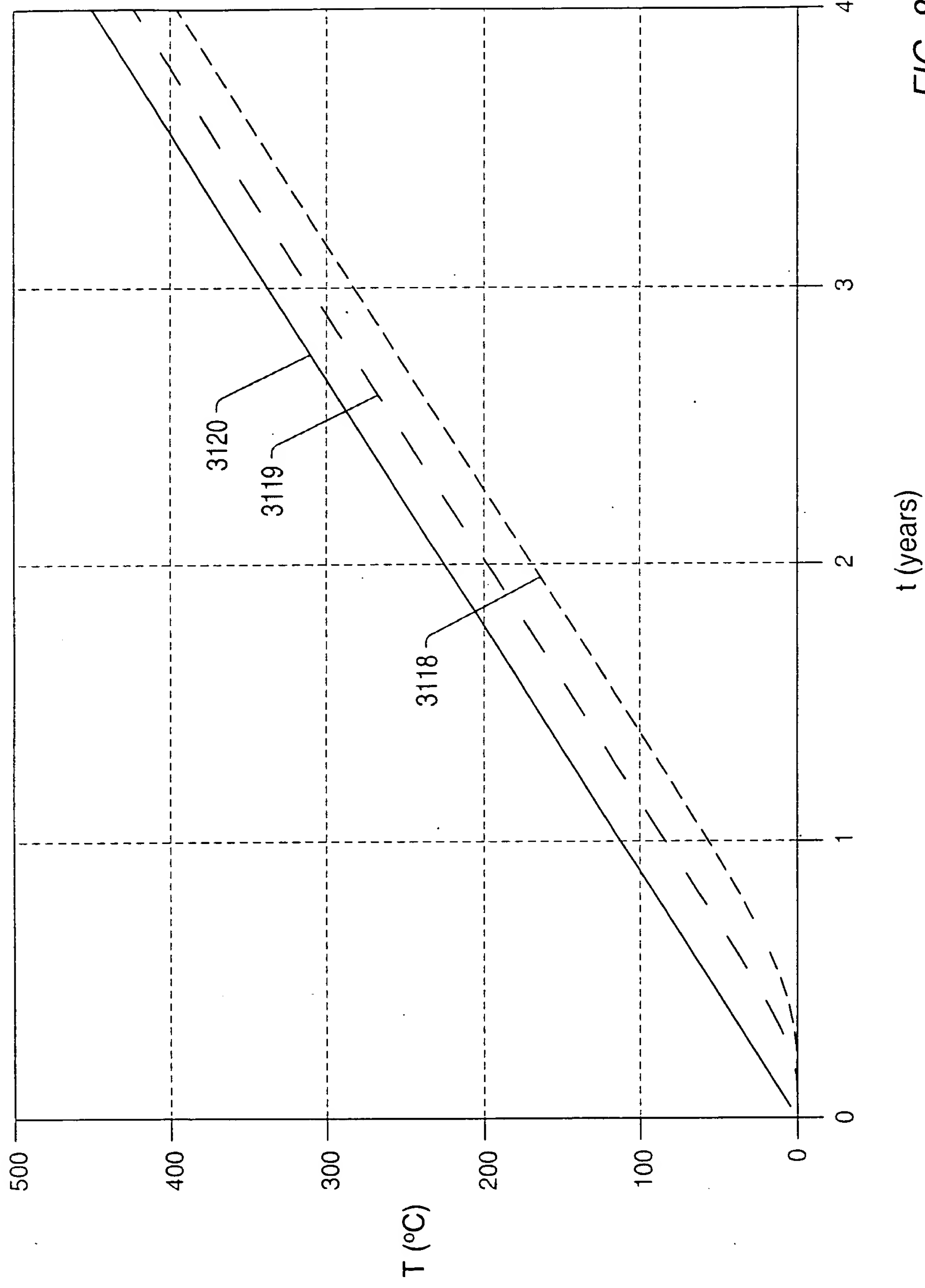


FIG. 81a



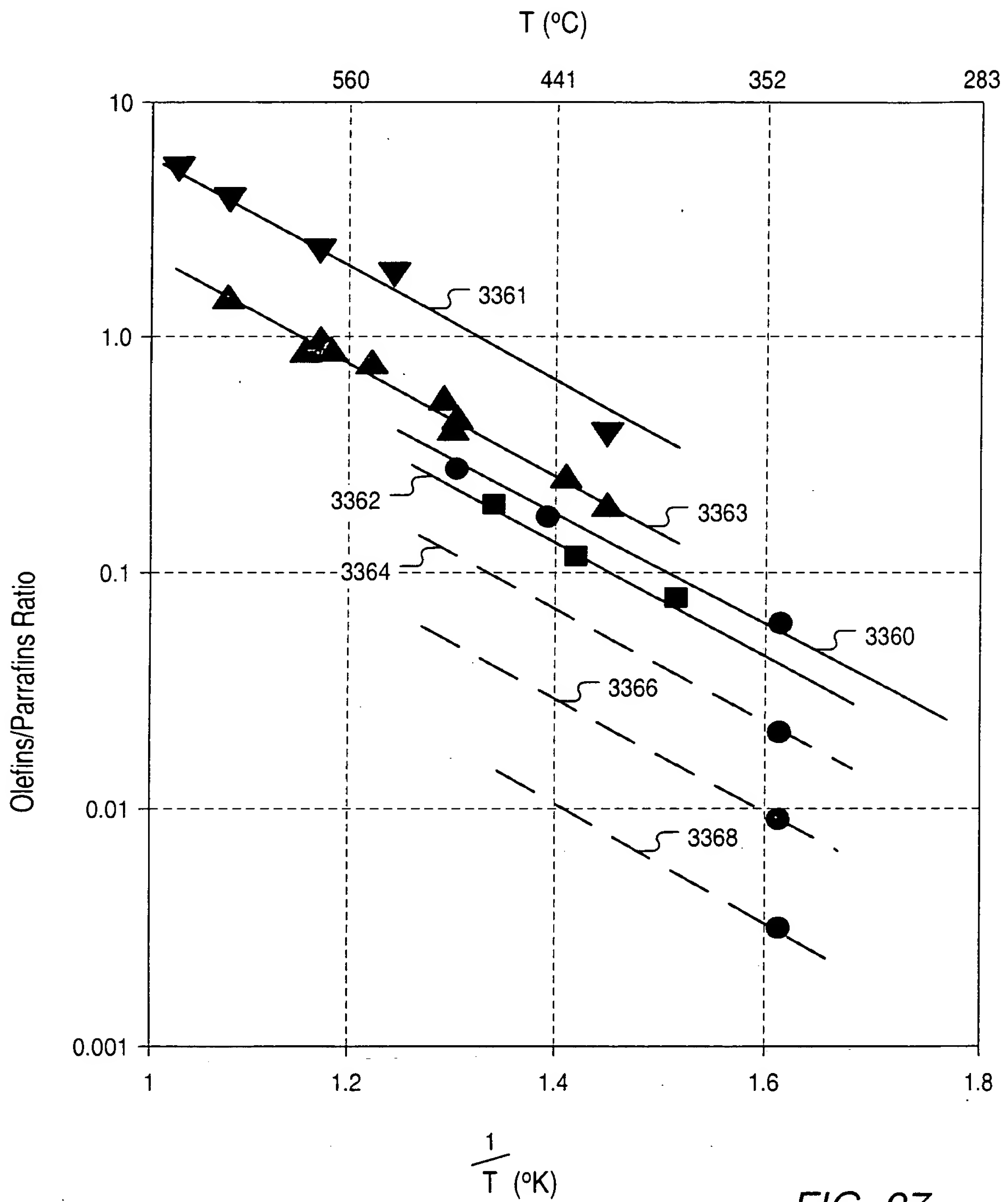


FIG. 97



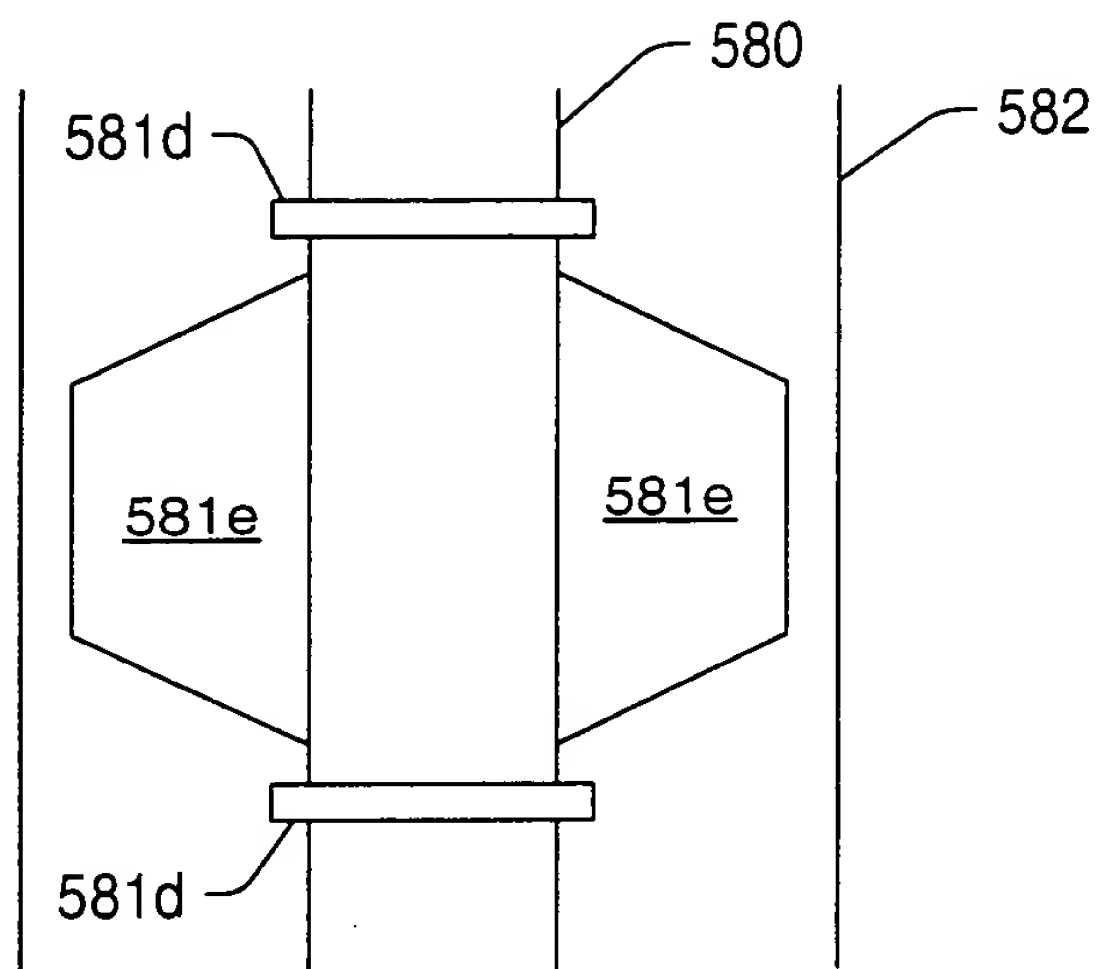


FIG. 23a

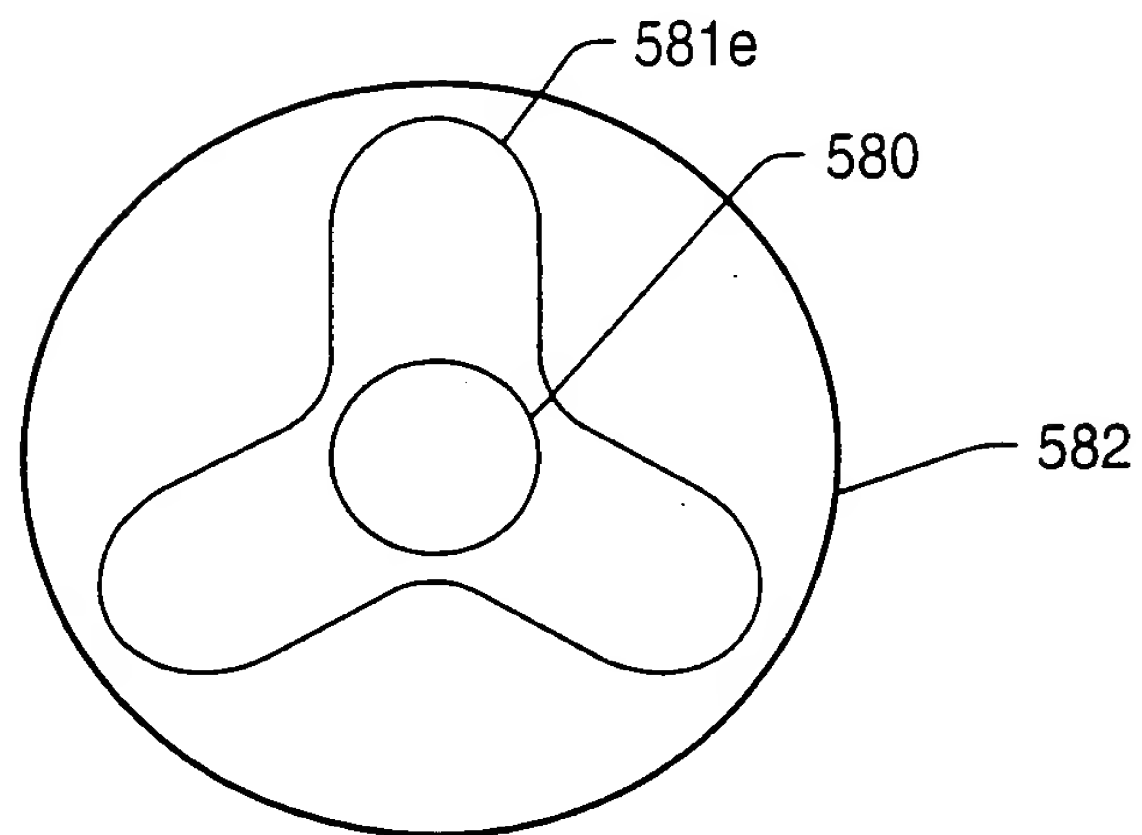


FIG. 23b



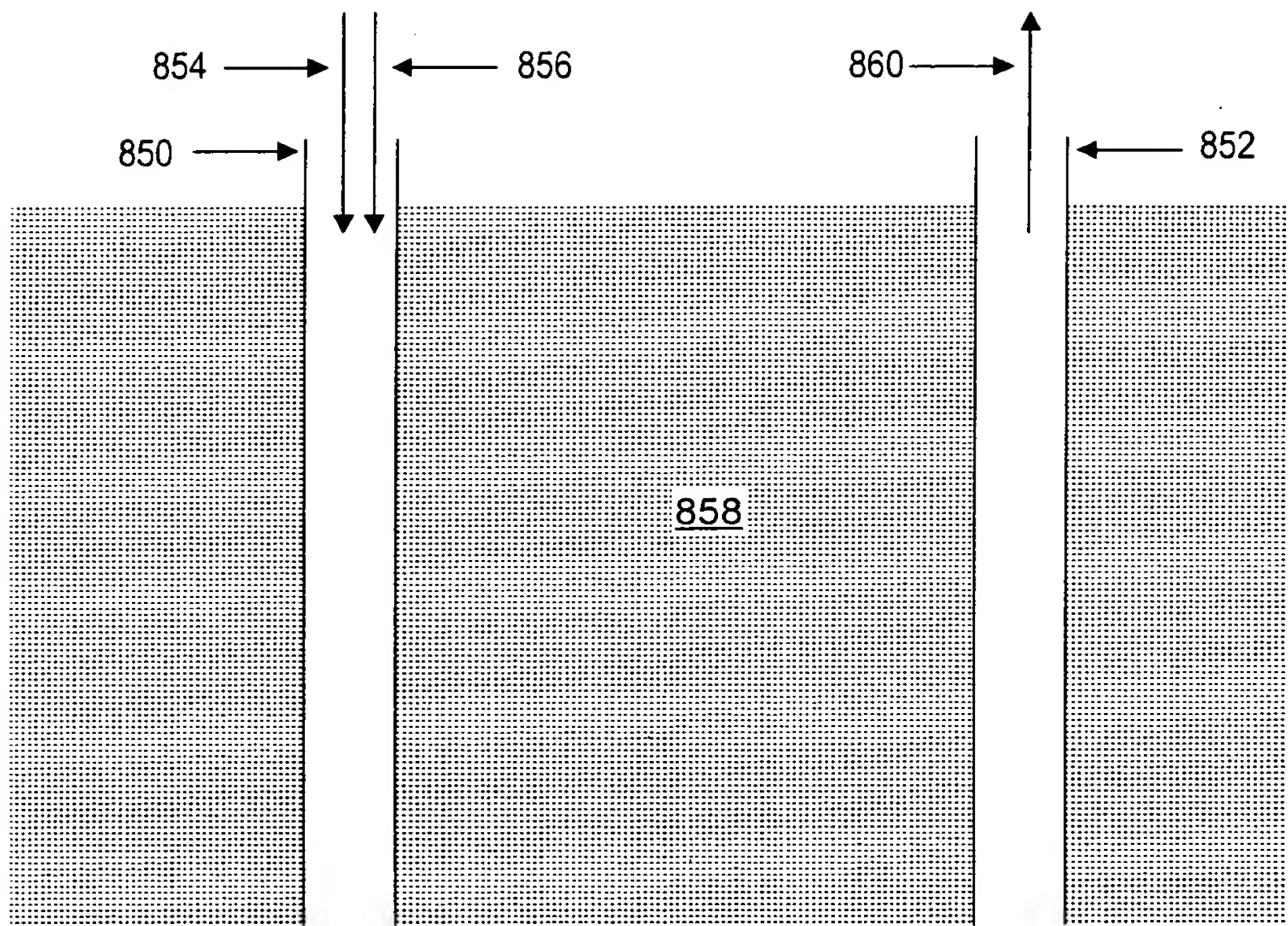


FIG. 31



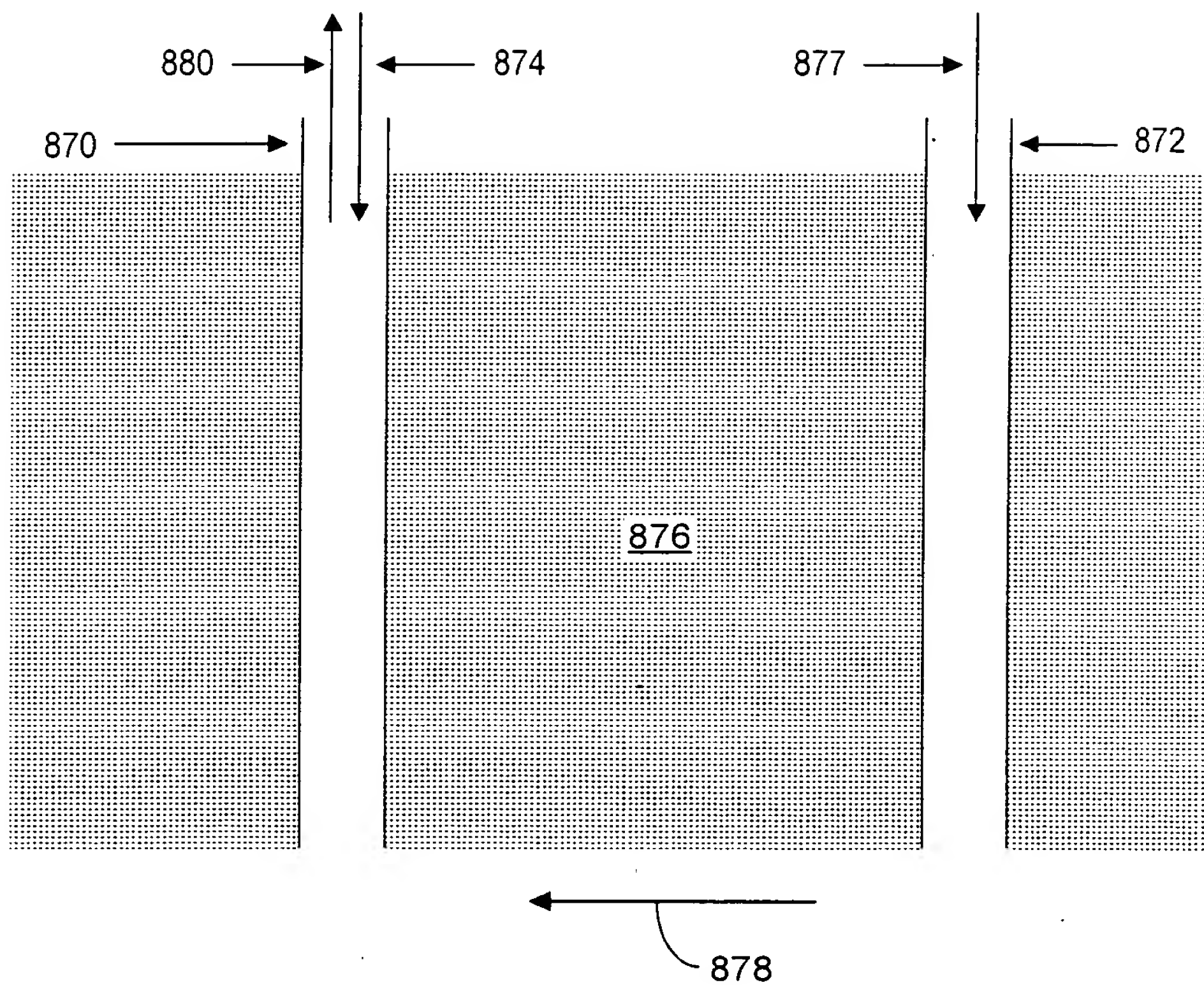


FIG. 32



FIG. 56

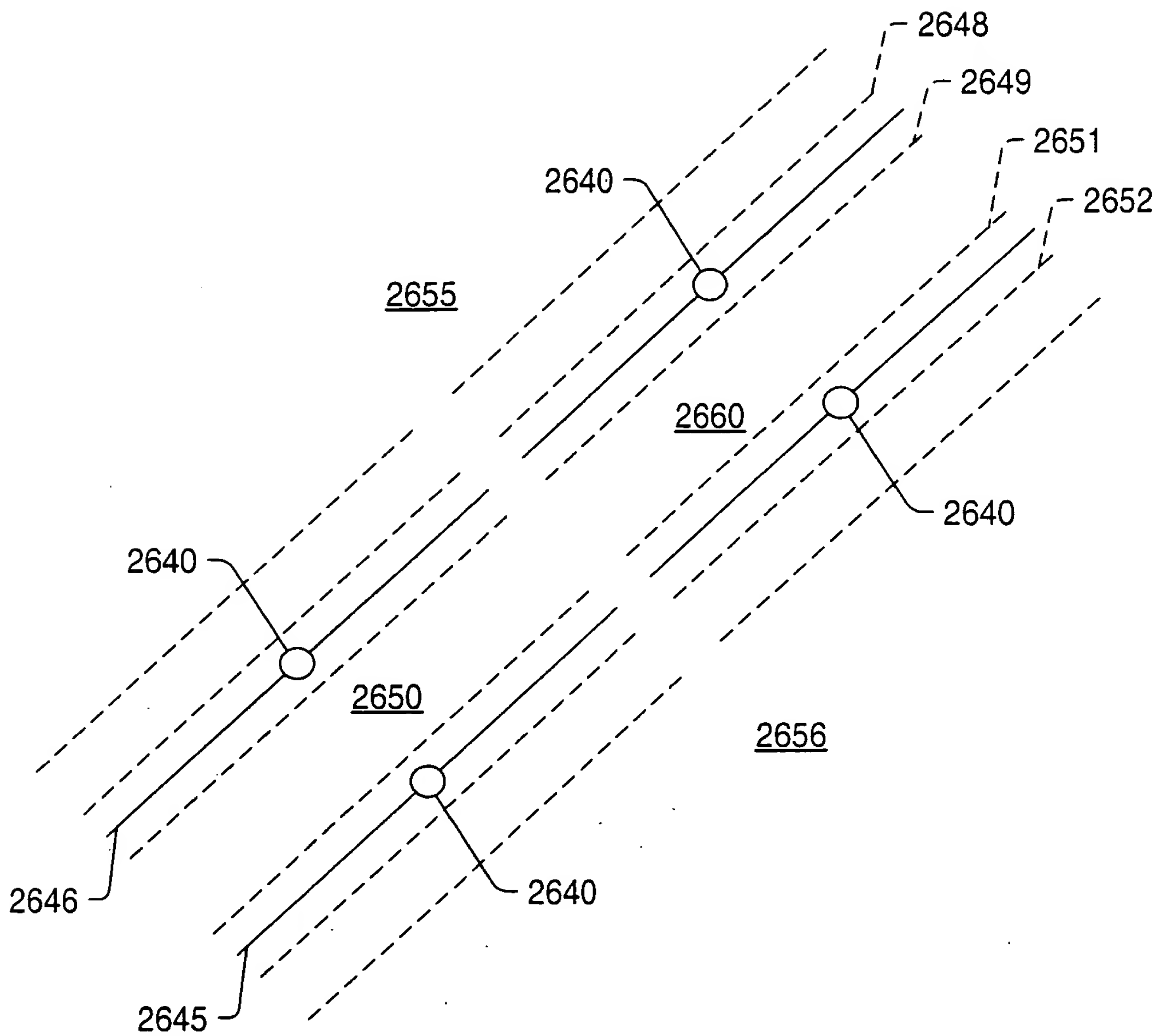


FIG. 56



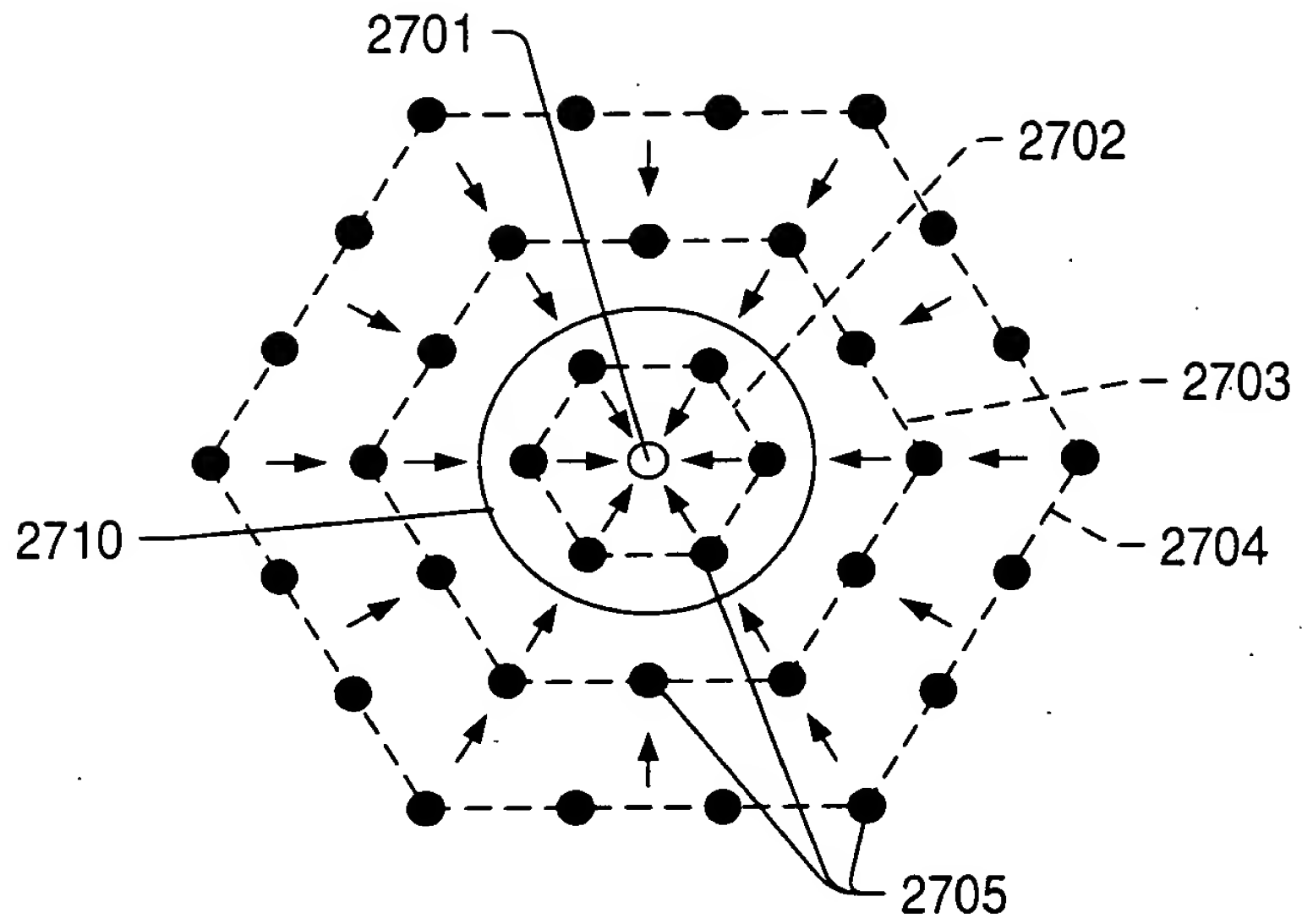


FIG. 57



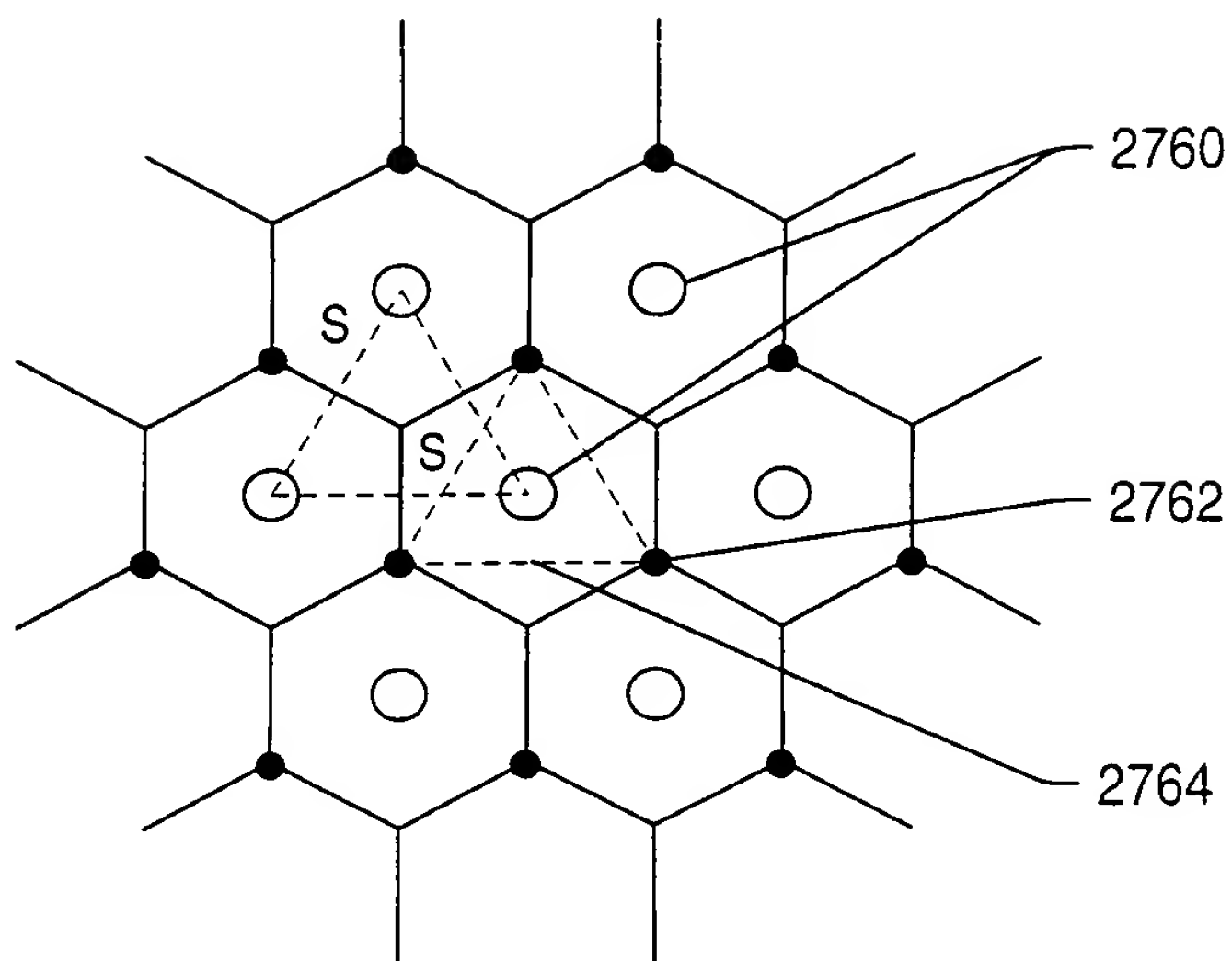


FIG. 66

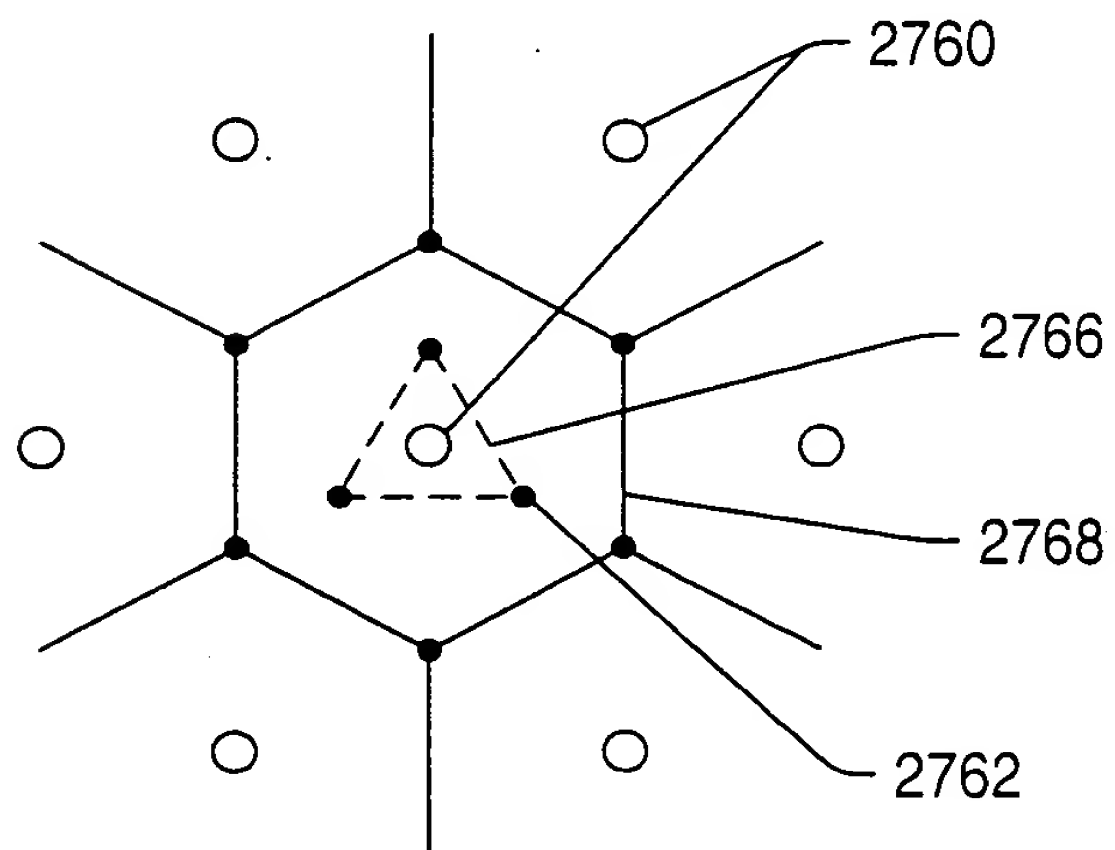


FIG. 67



FIG. 68

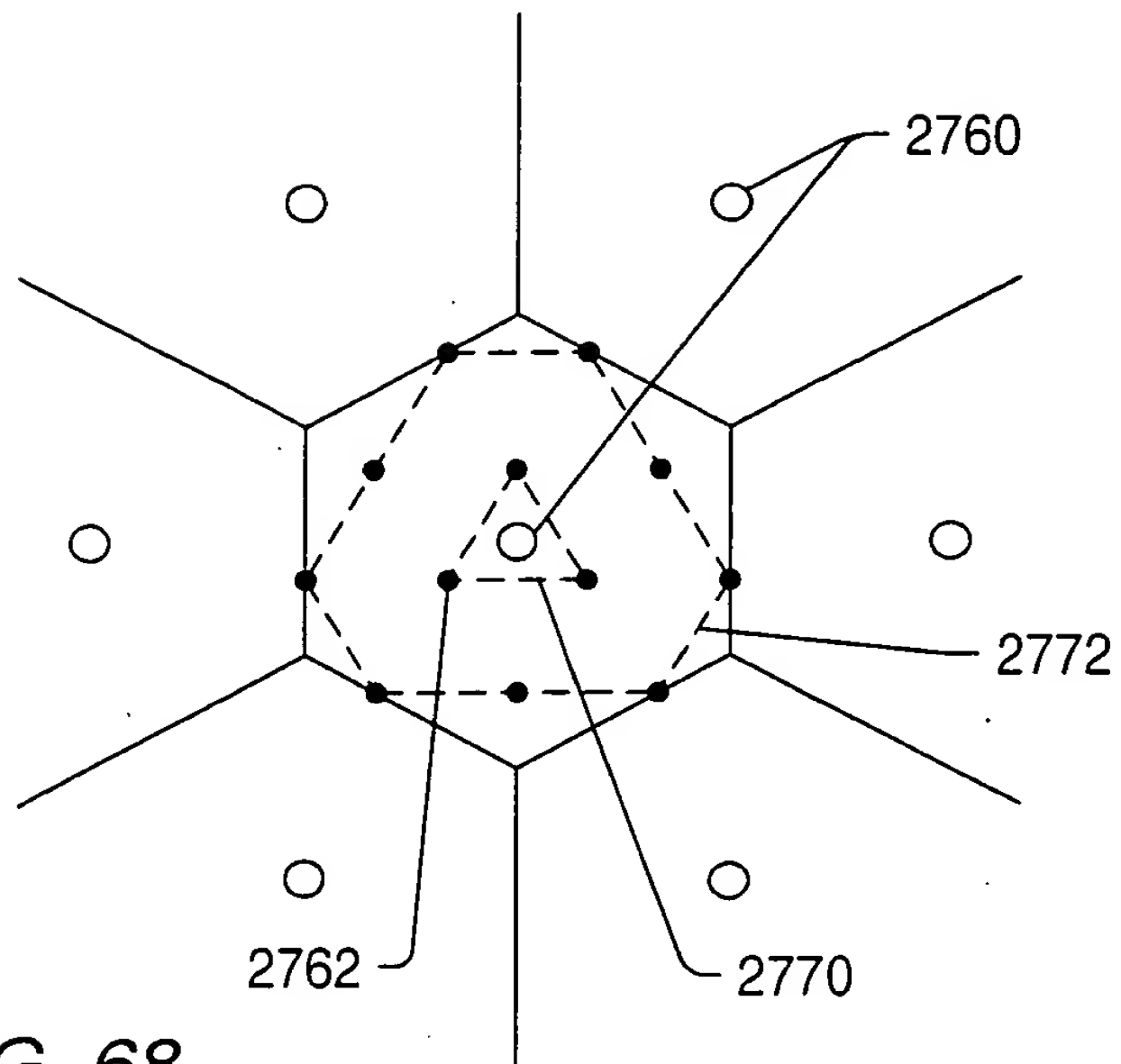


FIG. 68

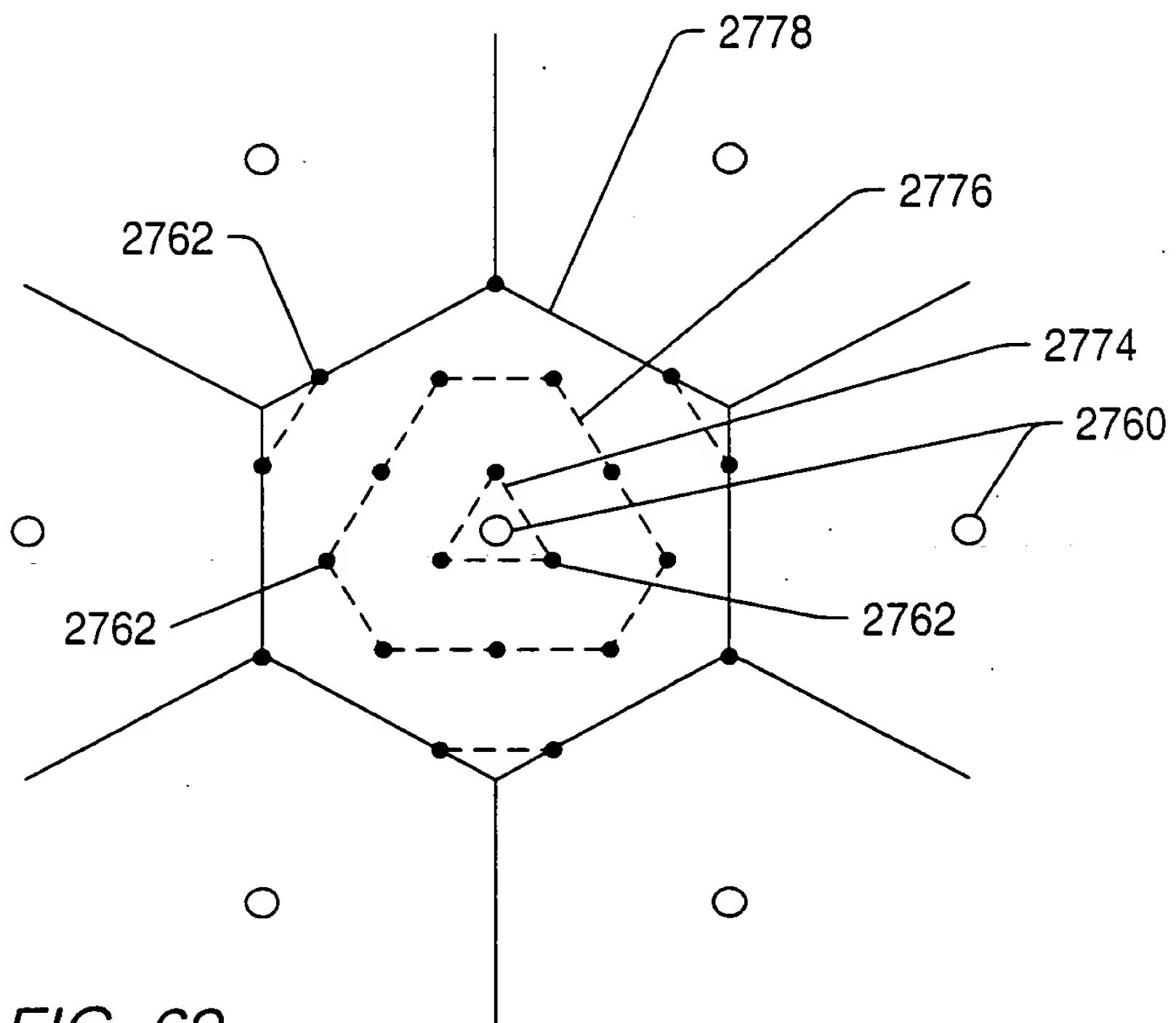


FIG. 69



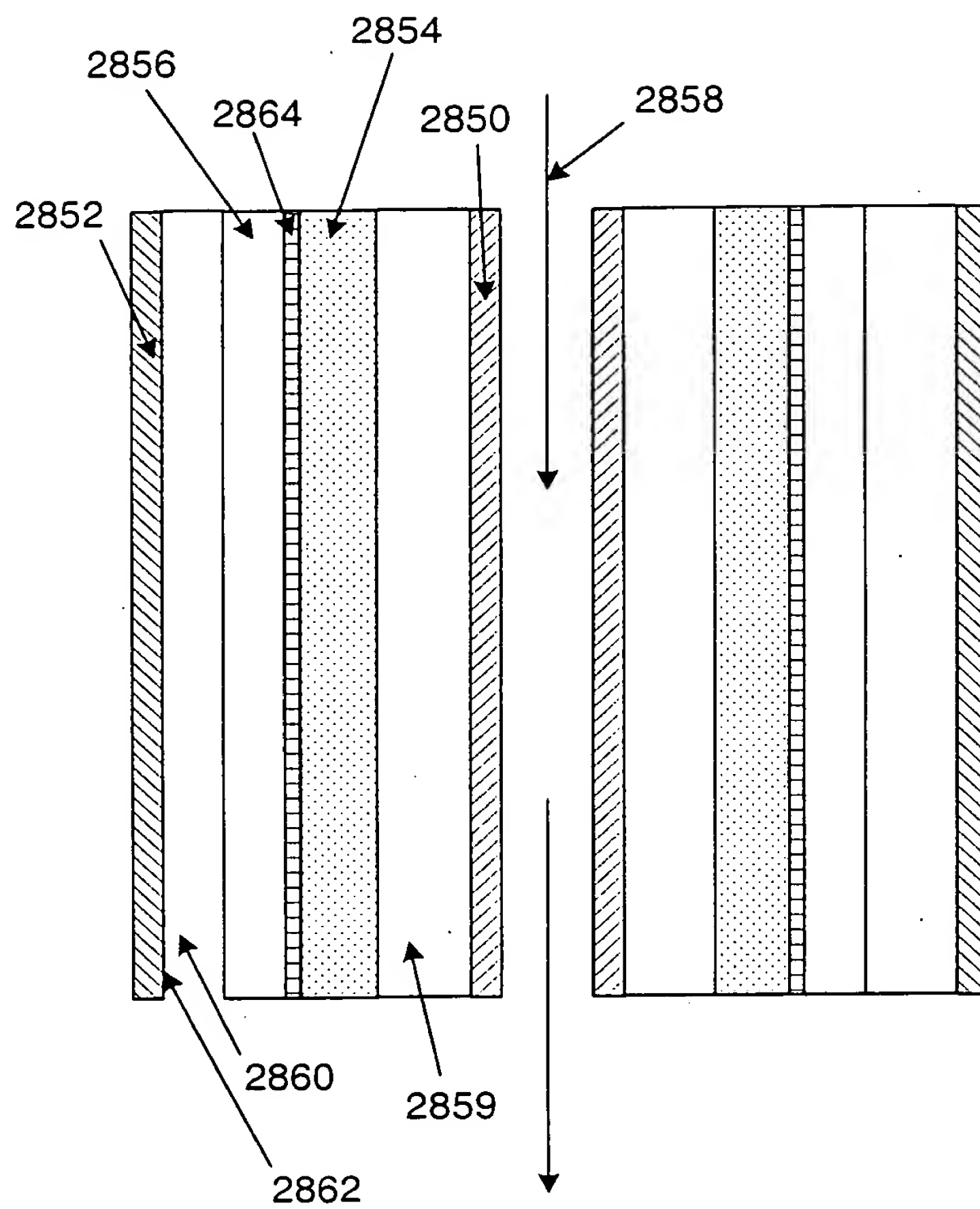


Fig. 72



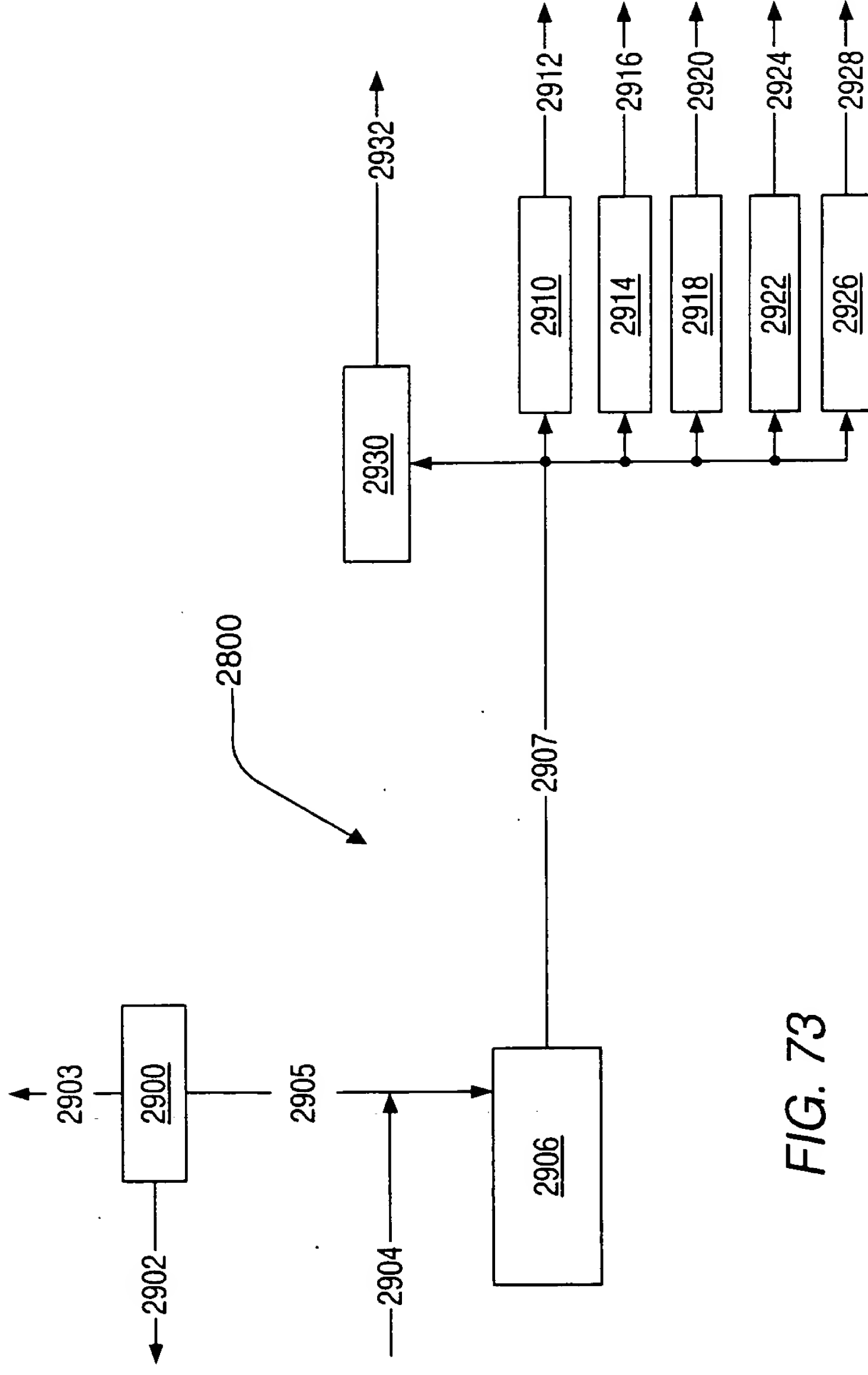


FIG. 73



FIG. 76 is a schematic diagram of a hexagonal lattice structure 3100. The lattice is composed of a central hexagon 3102 and six surrounding hexagons 3116. The central hexagon 3102 is shaded gray. The six surrounding hexagons 3116 are arranged in a ring around the central hexagon 3102. The lattice structure 3100 is formed by a network of lines connecting the vertices of the hexagons. The vertices are represented by black dots. The lattice structure 3100 is a hexagonal lattice structure.

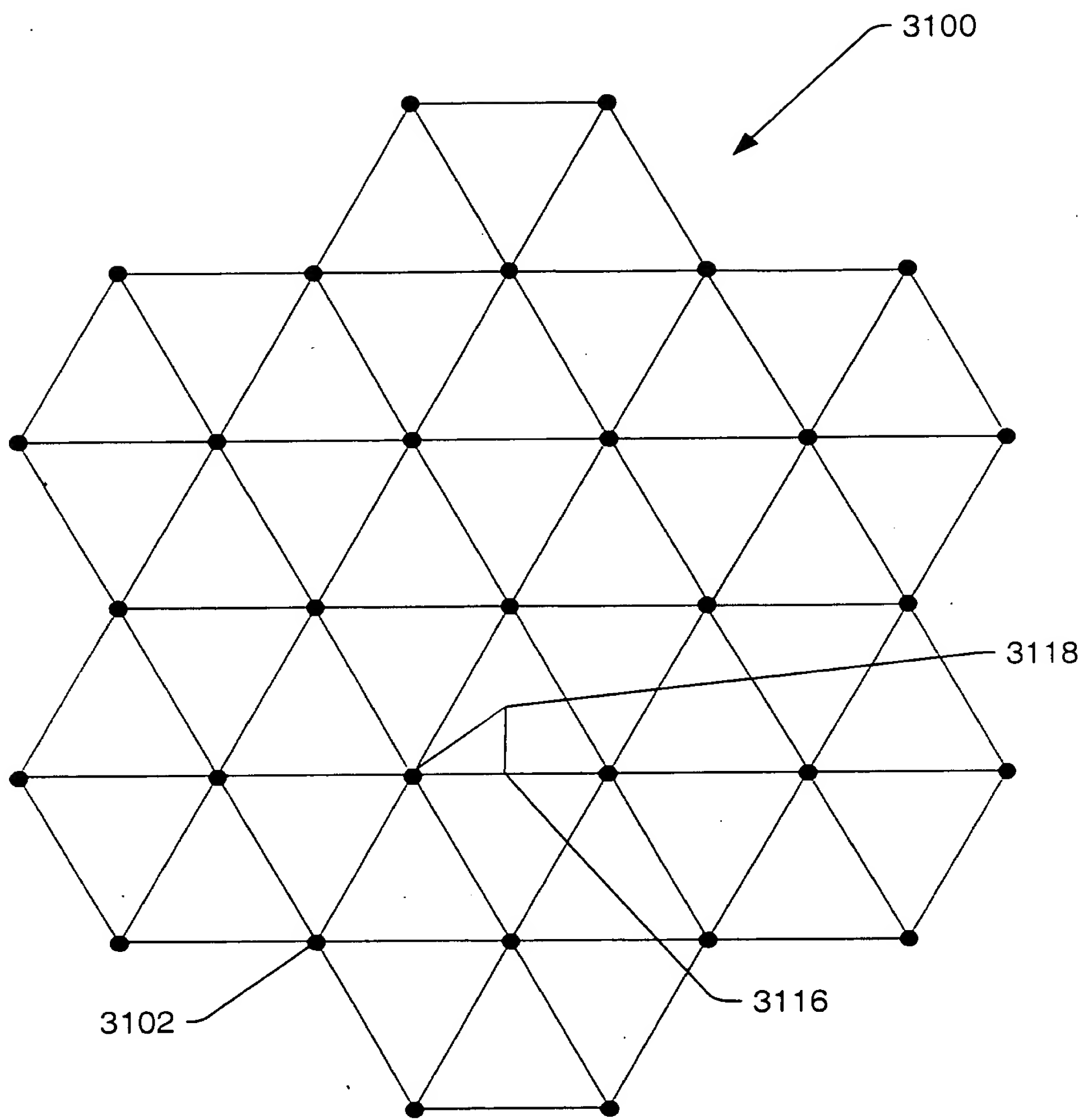


FIG. 76